Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Informati n Center 9/24/02

Requester's Full Name: David Lukton Examiner # : 71263 Date:
Art Unit: 1653 Phone Number 308-3213 Serial Number: 09/646599
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL
Mailbox: 9B01; Exr Rm: 9B01
If mor than one search is submitted, please prioritize searches in order of need.

****

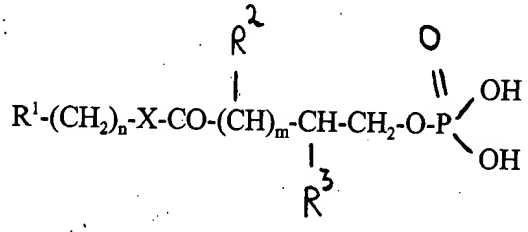
Title: Compositions containing lysophosphatidic acids which inhibit apoptosis and uses thereof

Applicants: GODDARD, JOHN G.; PICKER, DONALD H.; UMANSKY, SAMULL R.; PRICE, STEVEN; WIJKMANS, JAC C.; BOYD, EDWARD A.; BAXTER, ANTHONY D.

Earliest Priority Date: 3/18/98

* * * * * * *

Applicants are claiming the following:



R1 = alkyl or alkenyl

R2 = OH, $-NH_2$ or hydrogen;

R3 = OH, $-NH_2$, OPO_3H_2 or hydrogen;

X = -O- or -S-

n = an integer of 0 - 10

m = an integer of 0 - 2

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: _____ Point of Contact P. Sheppard	NA Sequence (#) _____	STN _____
Searcher Phone #: Telephone number: (703) 308-4499	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: 9/24/02	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

PTO-1590 (8-01)

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FILE COVERS 1907 - 24 Sep 2002  VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002  (20020923/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

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L5                STR
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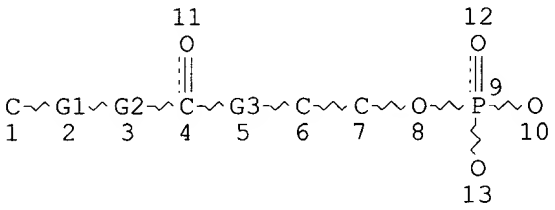


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VAR G2=O/S
REP G3=(0-2) C
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  13

STEREO ATTRIBUTES: NONE
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L10               STR
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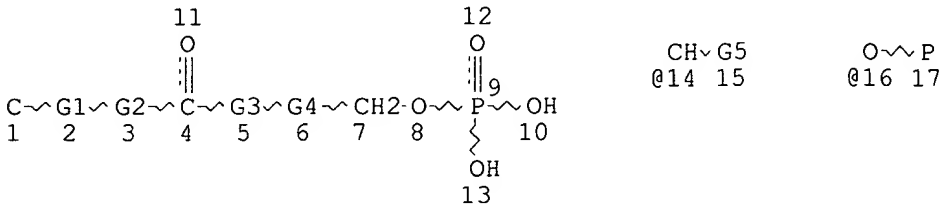

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VAR G2=O/S
REP G3=(0-2) CH
VAR G4=CH2/14
VAR G5=OH/NH2/16
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE
L11 35 SEA FILE=REGISTRY SUB=L7 SSS FUL L10
L12 30 SEA FILE=HCAPLUS ABB=ON PLU=ON L11

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=> d ibib abs hitrn 1-30

L12 ANSWER 1 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:658113 HCAPLUS
TITLE: Preparation of water-soluble triazole fungicides
INVENTOR(S): Mori, Makoto; Kagoshima, Yoshiko; Uchida, Takuya; Konosu, Toshiyuki; Shibayama, Takahiro
PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan
SOURCE: PCT Int. Appl., 301 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002066465	A1	20020829	WO 2002-JP1500	20020220

W: AU, BR, CA, CN, CO, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PH, PL, RU, SG, SK, US, VN, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRIORITY APPLN. INFO.: JP 2001-46890 A 20010222
AB The title triazole compds. XOCOLOR [wherein X represents such a group that the compd. represented by the formula XOH has antifungal activity; L represents (C6-10 aryl)CH2, etc.; further detail on said aryl is given; and R represents P(:O)(OH)2, etc.] are prepd. The conversion of one compd. of this invention into a fungicidal metabolite by human liver microsomes was demonstrated. A formulation is given.
IT **452977-80-9P**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of water-sol. triazole fungicides)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:637697 HCAPLUS
DOCUMENT NUMBER: 137:185830
TITLE: Preparation of amino acid derivatives as agonists and antagonists of sphingosine-1-phosphate receptors
INVENTOR(S): Macdonald, Timothy L.; Lynch, Kevin R.
PATENT ASSIGNEE(S): University of Virgina Patent Foundation, USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064616	A2	20020822	WO 2002-US2715	20020130

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-264927P P 20010130
US 2001-327814P P 20011009

AB The invention relates to sphingosine-1-phosphate (S1P) analogs that have activity as S1P receptor modulating agents and the use of such compds. to treat diseases assocd. with inappropriate S1P receptor activity. The compds. include those of general structure R1R2NCOCH(NH2)(CH2)mR3 [R1 = C8-C22 alkyl, alkenyl, alkynyl, or (CH2)n-Z-R4, where n = 0-10, Z = (hetero)aryl, and R4 = H, C1-10 alkyl, C1-20 alkoxy, alkylthio, or alkylamino; R2 = H, C1-4 alkyl, or arylmethyl; R3 = hydroxy, phosphonate, methylene phosphonate, .alpha.-substituted methylene phosphonate, phosphate analogs, or phosphonate analogs; m = 1-4]. Thus, H-D-Ser(PO3H2)-NHC6H4(CH2)5Me-m (VPC23031) was prepd. by a multistep scheme involving coupling of Boc-D-Ser(CH2Ph)-OH (Boc = tert-butoxycarbonyl) with H2NC6H4(CH2)5Me-m, which was prepd. from m-iodonitrobenzene and 1-hexyne. Graphical representations are shown for [.gamma.-35S]GTP binding to HEK293T cell membranes (contg. different SIP receptors) in response to S1P, VPC23031, and other compds. of the invention.

IT **384347-98-2P**, VPC 22053
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of amino acid derivs. as agonists and antagonists of sphingosine-1-phosphate receptors)

L12 ANSWER 3 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:936153 HCAPLUS
DOCUMENT NUMBER: 136:200382
TITLE: An Intramolecular Silyl Transfer from the Carboxylate to the Hydroxyl Group in Sodium 4-Hydroxybutyrate and Its Application to the Synthesis of Injectable Antifungal Posaconazole Derivative, Sch 59884
AUTHOR(S): Renton, P.; Shen, L.; Eckert, J.; Lee, G. M.; Gala,

D.; Chen, G.; Pramanik, B.; Schumacher, D.
CORPORATE SOURCE: Chemical Process Research and Development, Schering-Plough Research Institute, Union, NJ, 07083, USA
SOURCE: Organic Process Research & Development (2002), 6(1), 36-41
CODEN: OPRDFK; ISSN: 1083-6160
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Discovery of a novel intramol. silyl group migration from a carboxylic acid to the hydroxyl group of sodium 4-hydroxybutyric acid, unraveling of its reaction mechanism and application of this finding to the synthesis of injectable antifungal Sch 59884 are described.
IT **200346-83-4P**, Sch 59884
RL: SPN (Synthetic preparation); PREP (Preparation)
(intramol. silyl transfer from carboxylate to hydroxyl group in sodium 4-hydroxybutyrate in prepn. of Sch 59884)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:781552 HCAPLUS
DOCUMENT NUMBER: 136:65824
TITLE: Characterization of the human and mouse sphingosine 1-phosphate receptor, S1P5 (Edg-8): Structure-activity relationship of sphingosine 1-phosphate receptors
AUTHOR(S): Im, Dong-Soon; Clemens, Jeremy; Macdonald, Timothy L.; Lynch, Kevin R.
CORPORATE SOURCE: Departments of Pharmacology and Chemistry, University of Virginia, Charlottesville, VA, 22908, USA
SOURCE: Biochemistry (2001), 40(46), 14053-14060
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Five G protein-coupled receptors (S1P1/Edg-1, S1P3/Edg-3, S1P2/Edg-5, S1P4/Edg-6, and S1P5/Edg-8) for the intercellular lipid mediator sphingosine 1-phosphate have been cloned and characterized. The authors found human and mouse sequences closely related to rat S1P5 (97% identical amino acids) and report now the characterization of the human and mouse S1P5 gene products as encoding sphingosine 1-phosphate receptors. When HEK293T cells were cotransfected with S1P5 and G protein DNAs, prepd. membranes showed sphingosine 1-phosphate concn.-dependent increases in [.gamma.-35S]GTP binding (EC50 = 12.7 nM). The lipid mediator inhibited forskolin-driven rises in cAMP by greater than 80% after introduction of the mouse or human S1P5 DNAs into rat hepatoma RH7777 cells (IC50 = 0.22 nM). This response is blocked fully by prior treatment of cultures with pertussis toxin, thus implicating signaling through Gi/o.alpha. proteins. Northern blot anal. showed high expression of human S1P5 mRNA in spleen, corpus callosum, peripheral blood leukocytes, placenta, lung, aorta, and fetal tissues. Mouse S1P5 mRNA is also expressed in spleen and brain. Finally, the authors found that one enantiomer of a sphingosine 1-phosphate analog wherein the 3-hydroxyl and 4,5-olefin are replaced by an amide functionality shows some selectivity as an agonist S1P1 and S1P3 vs. S1P2 and S1P5.
IT **384347-98-2**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(prepn. and structure-activity relationships of sphingosine 1-phosphate receptor ligands and mol. characterization of human and mouse receptors)
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:771968 HCAPLUS
DOCUMENT NUMBER: 136:177414
TITLE: Simultaneous high-performance liquid chromatographic determination of SCH 59884 (phosphate ester prodrug of SCH 56592), SCH 207962 and SCH 56592 in dog plasma
AUTHOR(S): Kim, Hong; Kumari, Pramila; Lin, Chin-Chung; Nomeir, Amin A.
CORPORATE SOURCE: Department of Drug Metabolism and Pharmacokinetics, Schering-Plough Research Institute, Kenilworth, NJ, 07033, USA
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (2002), 27(1-2), 295-303
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB SCH 59884 is an IV prodrug of SCH 56592, the broad-spectrum azole antifungal agent that is active both orally and i.v. in animal models of infection. SCH 56592 is in phase III clin. trials for the treatment of serious systemic fungal infections. SCH 59884 is a carboxylate ester of SCH 56592 with .gamma.-butyric acid phosphate. Following IV administration of SCH 59884, the compd. is rapidly dephosphorylated to SCH 207962 which is then hydrolyzed to SCH 56592. A HPLC method was developed for the simultaneous detn. of SCH 59884, SCH 207962 and SCH 56592 in plasma of dogs, a species used for safety evaluation. The HPLC anal. involved protein pptn. with MeOH followed by sepn. on a C-18 column and quantitation by UV absorbance at 260 nm. The lower limits of quantification were 0.1 .mu.g/mL for SCH 59884 and 0.05 .mu.g/mL for SCH 207962 and SCH 56592 in dog plasma. The linearity for the three compds. was satisfactory as indicated by correlation coeffs. (r) of >0.98, back-calcd. concns. and visual examn. of the calibration curves. The precision and accuracy were satisfactory as shown by coeffs. of variation (CV) ranging from 2.4 to 10.6%, and bias values ranging from -8.4 to 13.3%. Also, SCH 59884 and SCH 207962 were stable in dog plasma after being subjected to three freeze-thaw cycles. SCH 56592 had been shown earlier to be stable under these conditions. The assay is specific, accurate, precise, and reliable for use in pharmacokinetic and toxicokinetic studies.
IT **200346-83-4**, SCH 59884
RL: ANT (Analyte); ANST (Analytical study)
(simultaneous high-performance liq. chromatog. detn. of SCH 59884 (phosphate ester prodrug of SCH 56592), SCH 207962 and SCH 56592 in dog plasma)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:745187 HCAPLUS
DOCUMENT NUMBER: 136:71495
TITLE: Synthesis of Injectable Antifungal Sch 59884
AUTHOR(S): Lee, Gary M.; Eckert, Jefrey; Gala, Dinesh; Schwartz, Martin; Renton, Paul; Pergamen, Edward; Whttington, Michael; Schumacher, Doris; Heimark, Larry; Shipkova, Petia
CORPORATE SOURCE: Chemical Process Research and Development, Schering-Plough Research Institute, Union, NJ, 07083, USA
SOURCE: Organic Process Research & Development (2001), 5(6), 622-629
CODEN: OPRDFK; ISSN: 1083-6160

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A large-scale synthesis was developed for the prepn. of multi-kilogram quantities of the injectable antifungal Sch 59884 from 4-hydroxy sodium butyrate and a dibenzylphosphate deriv. prepd. by addn. of dibenzyl phosphite to NCS in toluene. Subsequent incorporation of the stereogenic moiety Sch 56592 and removal of bis-butyrophosphate by debenzylation led to 0.65-0.67 kg of the product Sch 59884 in 79-81% yield.
IT **200346-83-4P**, Sch 59884
RL: IMF (Industrial manufacture); PUR (Purification or recovery); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(Sch 59884; development of large-scale synthesis procedure for manuf. of injectable antifungal Sch 59884)
IT **383428-68-0P**
RL: BYP (Byproduct); PREP (Preparation)
(development of large-scale synthesis procedure for manuf. of injectable antifungal Sch 59884)
IT **262266-08-0P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(development of large-scale synthesis procedure for manuf. of injectable antifungal Sch 59884)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:693968 HCAPLUS
DOCUMENT NUMBER: 136:53728
TITLE: SOB as an alternate to BOB: findings from the preparation of injectable antifungal Sch 59884
AUTHOR(S): Renton, P.; Gala, D.; Lee, G. M.
CORPORATE SOURCE: Chemical Process Research & Development, Schering-Plough Research Institute, Union, NJ, 07083, USA
SOURCE: Tetrahedron Letters (2001), 42(41), 7141-7143
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A facile prepn. of 4-silyloxybutyrates (SOB) and their potential use as an alternate to 4-benzyloxybutyrate (BOB) are described.
IT **200346-83-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(use of silyloxybutyrates and benzyloxybutyrates as protecting groups)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:472655 HCAPLUS
DOCUMENT NUMBER: 135:77104
TITLE: Preparation of acyl pseudopeptides bearing a functionalized auxiliary spacer
INVENTOR(S): Bauer, Jacques; Martin, Olivier Richard; Rodriguez, Sylvain
PATENT ASSIGNEE(S): OM Pharma, Switz.
SOURCE: PCT Int. Appl., 165 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001046127	A1	20010628	WO 1999-IB2038	19991222

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

WO 2001046126	A1	20010628	WO 2000-FR3650	20001221

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: WO 1999-IB2038 W 19991222

OTHER SOURCE(S): MARPAT 135:77104

AB N-acyl pseudopeptides X(CH2)mCH(NHR1)(CH2)nCO-Y-(CH2)pCH(NHR2)(CH2)qZ [R1, R2 = (un)substituted C2-C24 acyl; m, n = 0-10; p, q = 1-10; X, Z = a neutral or charged acid group or (at least one) functionalized auxiliary spacer, preferably carboxy[(C1-C5)alkoxy],carboxy[(C1-C5)alkylthio],phosphono[(C1-C5)alkoxy],phosphono[(C1-C5)alkylthio],dihydroxyphosphoryloxy[(C1-C5)alkoxy],dihydroxyphosphoryloxy,hydroxysulfonyloxy,hydroxysulfonyl[(C1-C5)alkoxy], hydroxysulfonyl[(C1-C5)alkylthio],hydroxysulfonyloxy[(C1-C5)alkoxy], and hydroxysulfonyloxy[(C1-C5)alkylthio]; Y = O, NH] were prepd. as immunomodulators. The compds. can further be grafted on an antigen to modulate immune response or also grafted on a pharmaceutical substance to improve its therapeutic activity or its targeting. Thus, 3-[(R)-3-dodecanoyloxytetradecanoylamino]-4-oxo-5-aza-9-[(R)-3-hydroxytetradecanoylamino]decan-1,10-diol 1-dihydrogen phosphate 10-(6-oxohexanoate) was prepd. and reacted to form conjugates with peptides (NANP)6P2P30, P2P30, and (NANP)3CS.T3 as well as ovalbumin and hemagglutinin H1N1. Compds. of the invention were evaluated pharmacol.

IT **346670-09-5P 346670-23-3P 346670-29-9P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of acyl pseudopeptides bearing a functionalized auxiliary spacer)

IT **346670-08-4P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of acyl pseudopeptides bearing a functionalized auxiliary spacer)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:203030 HCAPLUS

DOCUMENT NUMBER: 132:231937

TITLE: Tetrahydrofuran antifungal phosphate, preparation thereof, and pharmaceutical compositions

INVENTOR(S): Bennett, Frank; Girijavallabhan, Viyyoor M.; Patel, Naginbhai M.; Saksena, Anil K.; Ganguly, Ashit

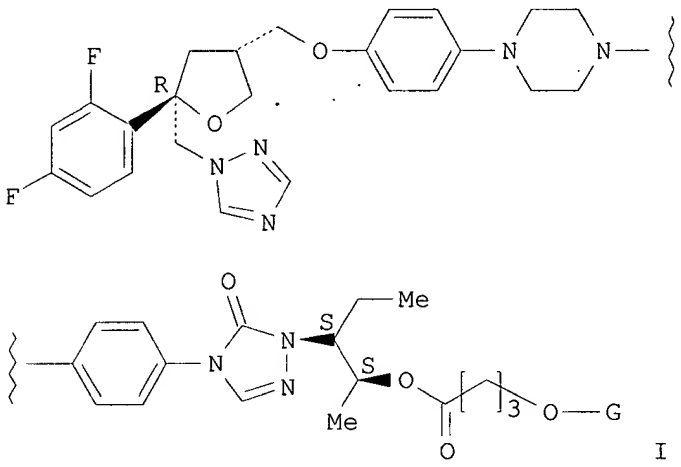
PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6043245	A	20000328	US 1998-160997	19980925

PRIORITY APPLN. INFO.: US 1997-60678P P 19970925
GI



I

AB A compd. I (G = H, PO3H2), or a pharmaceutical acceptable salt thereof, pharmaceutical compns. contg. such compds., and a method of using such compds. or pharmaceutical compns. contg. them to treat or prevent fungal infection are disclosed.

IT **200346-83-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(THF deriv. phosphate antifungal agent, prepn., and pharmaceutical compns.)

IT **185961-19-7**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(THF deriv. phosphate antifungal agent, prepn., and pharmaceutical compns.)

IT **262266-08-0P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(THF deriv. phosphate antifungal agent, prepn., and pharmaceutical compns.)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:222932 HCAPLUS
DOCUMENT NUMBER: 130:252364
TITLE: Preparation of an aryloxotriazolylmethylbutoxyoxobutanol and its phosphate ester as antifungal prodrugs.

INVENTOR(S): Bennett, Frank; Girijavallabhan, Viyyoor M.; Patel, Naginbhai M.; Saksena, Anil K.; Ganguly, Ashit
PATENT ASSIGNEE(S): Schering Corporation, USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9915522	A1	19990401	WO 1998-US18508	19980922
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GD, GE, HR, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9808688	A	19990323	ZA 1998-8688	19980922
CA 2304624	AA	19990401	CA 1998-2304624	19980922
AU 9916981	A1	19990412	AU 1999-16981	19980922
EP 1027349	A1	20000816	EP 1998-961721	19980922
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, LT, LV, FI, RO				
BR 9812671	A	20000822	BR 1998-12671	19980922
JP 2001517665	T2	20011009	JP 2000-512827	19980922
NO 2000001557	A	20000324	NO 2000-1557	20000324

PRIORITY APPLN. INFO.: US 1997-937827 A2 19970925
WO 1998-US18508 W 19980922

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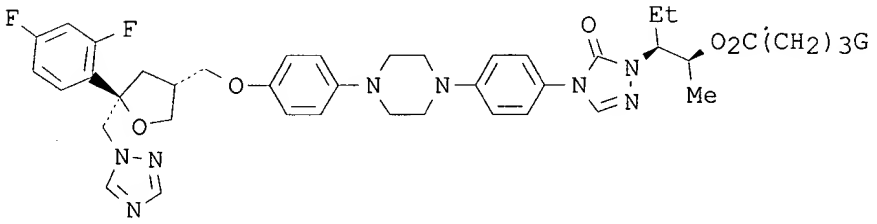


I

AB Title compds. (I; G = OH, OPO3H2), and salts thereof, were prepd. Thus, I (G = Br) (prepn. given) was refluxed 20 h with Ag dibenzylphosphate in benzene to give I [G = OP(O)(OCH2Ph)2]. The latter was hydrogenolyzed in HOAc over Pd/C for 16 h at room temp. to give I (G = OPO3H2) (II). II showed a min. inhibitory concn. of 1.9 .mu.g/mL against Cryptococcus neoformans.

IT **200346-83-4P 221615-77-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of an aryloxotriazolylmethylbutoxyoxobutanol and its phosphate ester as antifungal prodrugs)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

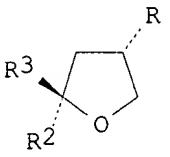
L12 ANSWER 11 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:98052 HCAPLUS
DOCUMENT NUMBER: 128:128036

TITLE: Preparation of 1,4-diphenylpiperazines as medical fungicides
INVENTOR(S): Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-Tsung; Ganguly, Ashit K.; Bennett, Frank
PATENT ASSIGNEE(S): Schering Corp., USA
SOURCE: U.S., 40 pp., Cont.-in-part of U.S. Ser. No. 171,083, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5714490	A	19980203	US 1995-458543	19950602
CA 2179396	AA	19950629	CA 1994-2179396	19941220
ZA 9410142	A	19960502	ZA 1994-10142	19941220
CN 1142828	A	19970212	CN 1994-195025	19941220
CN 1064685	B	20010418		
HU 75879	A2	19970528	HU 1996-1709	19941220
IL 112081	A1	20010826	IL 1994-112081	19941220
ES 2159623	T3	20011016	ES 1995-906620	19941220
CA 2197672	AA	19961205	CA 1996-2197672	19960530
WO 9638443	A1	19961205	WO 1996-US7547	19960530
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, US, US, UZ, VN, AM, AZ, BY, KG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9659280	A1	19961218	AU 1996-59280	19960530
EP 773941	A1	19970521	EP 1996-916574	19960530
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1161038	A	19971001	CN 1996-190848	19960530
CN 1073109	B	20011017		
IL 118464	A1	20000813	IL 1996-118464	19960530
NO 9701218	A	19970317	NO 1997-1218	19970317

PRIORITY APPLN. INFO.:
US 1993-171083 B2 19931221
US 1995-458543 A 19950602
US 1995-459145 A 19950602
US 1995-459225 A 19950602
WO 1996-US7547 W 19960530

OTHER SOURCE(S): MARPAT 128:128036
GI



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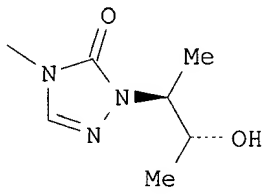

III

AB Title compds. (I; R = CH2OZZ1ZR1; R2 = 1H-1,2,4-triazol-1-ylmethyl; Z = 1,4-phenylene; Z1 = piperazine-1,4-diyl)[II; R1 = (un)esterified 2-hydroxyalkyl-2,4-dihydro-3H-1,2,4-triazol-4-yl; R3 = C6H3Cl2-2,4, C6H3F2-2,4, C6H3FCl-2,4, C6H3FCl-4,2] were prepd. Thus, I (R = OTs, R2 =

1H-1,2,4-triazol-1-ylmethyl, R3 = C6H3F2-2,4)(10 step prepn. given) was converted in 5 steps to II (R1 = 2,4-dihydro-3H-1,2,4-triazol-4-yl, R3 = C6H3F2-2,4) which was condensed with (R,R)-MeCH(OSO2C6H4Br-4)CH(OCH2OCH2CH2SiMe3)Me (prepn. given) to give II (R1 = hydroxybutyloxotriazolo group III, R3 = C6H3F2-2,4). Data for biol. activity of I were given.

IT **185961-17-5P 185961-19-7P 200346-83-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 1,4-diphenylpiperazines as medical fungicides)

L12 ANSWER 12 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:62224 HCAPLUS
DOCUMENT NUMBER: 128:128035
TITLE: Preparation of 1,4-diphenylpiperazines as medical fungicides
INVENTOR(S): Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-Tsung; Ganguly, Ashit K.; Bennett, Frank
PATENT ASSIGNEE(S): Schering Corp., USA
SOURCE: U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 171,083, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5710154	A	19980120	US 1995-459225	19950602
CA 2179396	AA	19950629	CA 1994-2179396	19941220
ZA 9410142	A	19960502	ZA 1994-10142	19941220
CN 1142828	A	19970212	CN 1994-195025	19941220
CN 1064685	B	20010418		
HU 75879	A2	19970528	HU 1996-1709	19941220
IL 112081	A1	20010826	IL 1994-112081	19941220
ES 2159623	T3	20011016	ES 1995-906620	19941220
CA 2197672	AA	19961205	CA 1996-2197672	19960530
WO 9638443	A1	19961205	WO 1996-US7547	19960530
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, US, US, UZ, VN, AM, AZ, BY, KG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9659280	A1	19961218	AU 1996-59280	19960530
ZA 9604444	A	19970303	ZA 1996-4444	19960530
EP 773941	A1	19970521	EP 1996-916574	19960530
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1161038	A	19971001	CN 1996-190848	19960530
CN 1073109	B	20011017		
IL 118464	A1	20000813	IL 1996-118464	19960530
NO 9701218	A	19970317	NO 1997-1218	19970317

PRIORITY APPLN. INFO.:
US 1993-171083 B2 19931221
US 1995-458543 A 19950602
US 1995-459145 A 19950602
US 1995-459225 A 19950602
WO 1996-US7547 W 19960530

OTHER SOURCE(S): MARPAT 128:128035
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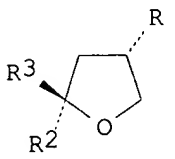

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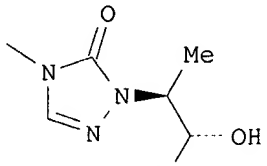

III

AB Title compds. (I; R = CH2OZZ1ZR1; R2 = 1H-1,2,4-triazol-1-ylmethyl; Z = 1,4-phenylene; Z1 = piperazine-1,4-diyl)[II; R1 = (un)esterified 2-hydroxyalkyl-2,4-dihydro-3H-1,2,4-triazol-4-yl; R3 = C6H3Cl2-2,4, C6H3F2-2,4, C6H3FCl-2,4, C6H3FCl-4,2] were prepd. Thus, I (R = OTs, R2 = 1H-1,2,4-triazol-1-ylmethyl, R3 = C6H3F2-2,4)(10 step prepn. given) was converted in 5 steps to II (R1 = 2,4-dihydro-3H-1,2,4-triazol-4-yl, R3 = C6H3F2-2,4) which was condensed with (R,R)-MeCH(OSO2C6H4Br-4)CH(OCH2OCH2CH2SiMe3)Me (prepn. given) to give II (R1 = hydroxybutyloxotriazolo group III, R3 = C6H3F2-2,4). Data for biol. activity of I were given.

IT **185961-17-5P 185961-19-7P 200346-83-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 1,4-diphenylpiperazines as medical fungicides)

L12 ANSWER 13 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:15732 HCAPLUS
DOCUMENT NUMBER: 128:102100
TITLE: Preparation of 2-phenyl-2-(1,2,4-triazol-1-ylmethyl)-5-[4-(1-piperazinyl)phenoxymethyl]tetrahydrofuran derivatives as antifungal agents
INVENTOR(S): Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-tsung; Ganguly, Ashit K.; Bennett, Frank
PATENT ASSIGNEE(S): Schering Corp., USA
SOURCE: U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 171,083, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5703236	A	19971230	US 1995-458551	19950602
CA 2179396	AA	19950629	CA 1994-2179396	19941220
ZA 9410142	A	19960502	ZA 1994-10142	19941220
CN 1142828	A	19970212	CN 1994-195025	19941220
CN 1064685	B	20010418		
HU 75879	A2	19970528	HU 1996-1709	19941220
IL 112081	A1	20010826	IL 1994-112081	19941220
ES 2159623	T3	20011016	ES 1995-906620	19941220
CN 1161038	A	19971001	CN 1996-190848	19960530
CN 1073109	B	20011017		

PRIORITY APPLN. INFO.: US 1993-171083 B2 19931221
OTHER SOURCE(S): MARPAT 128:102100
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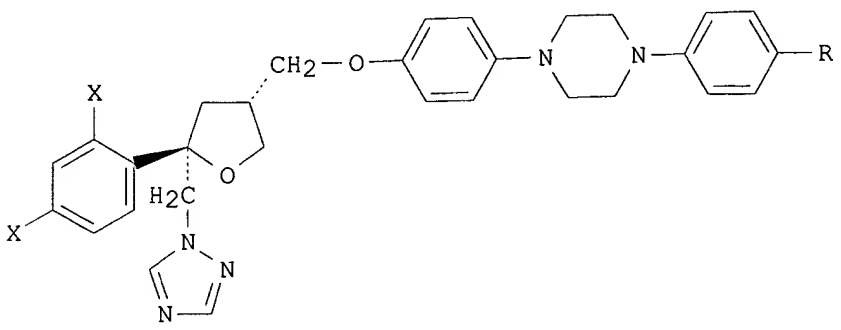

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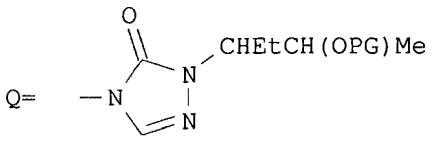

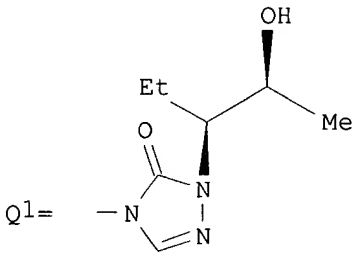

AB Compds. represented by the formula [I; R = Q; wherein PG = H; X is independently both F or both Cl or one X is independently F and the other is independently Cl; R1 = a straight or branched chain C3-8 alkyl group substituted by one or two hydroxy moieties, an ether ester (e.g., a polyether ester or phosphate ester); wherein the abs. stereochem. at each asterisk carbon (*) is same i.e., S,S or R,R substantially free of S,R or R,S] or esters thereof or pharmaceutically acceptable salts thereof and pharmaceutical compns. thereof useful for treating and/or preventing fungal infections are disclosed. They are prepd. by contacting (S) or (R)-lactic acid ester with pyrrolidine and a hydroxy protecting group reagent to convert it into the corresponding lactic acid amide, which is selectively reduced to the corresponding propionaldehyde and then converted into the corresponding N-formylaminopropanimine which comprises: (a) reacting the N-formylaminopropanimine of the formula MeC*H(OPG)CH(:NNHCHO) with ethylmagnesium bromide under Grignard reaction conditions sufficient to produce a compd. of the formula MeCH*CHEtNHNHCHO (II)[wherein the abs. stereochem. induced at the double asterisk carbon (**) is substantially the same as that at the single asterisk carbon and wherein PG is a hydroxy protecting group] and (b) reacting the compd. of formula II with a compd. of formula I (R = NHCO2Ph; X = same as above) in the presence of 1,8-diazabicycloundec-7-ene and at elevated temps. for a time sufficient to produce the compd. of formula I (R = Q; PG = hydroxy-protecting group; X = same as above), and (c) reacting the latter compd. with a catalytic amt. of Pd black on carbon in the presence of formic acid. Thus, O-benzyl-(S)-lactic acid pyrrolidine amide was reduced by sodium bis(2-methoxyethoxy)aluminum hydride in toluene in an ice methanol bath for 5 h to give (S)-2-(benzyloxy)propionaldehyde which was condensed with formylhydrazine in MeOH overnight to give (S)-2-(Benzyloxy)-N-(Formylamino)propanimine. Ethylmagnesium bromide in Et2O was to a soln. of the latter compd. in Et2O and the resulting soln. was stirred at room temp. overnight to give 2-[3-(2S,3S)-2-(Benzyloxy)pentyl]formic acid hydrazide (III) in a (S,S)- and (S,R)-isomer ratio of 94:6. When the reaction was repeated in the presence of 1.2 equiv of bis(trimethylsilyl)acetamide the (S,S):(S,R) ratio improved to 99:1. III was stirred with DBU at 80.degree. for 6 h and at 100-110.degree. overnight to give the benzyl ether which was

hydrogenolyzed in the presence of Pd black in MeOH and formic acid to give I (R = Q1). The latter compd. in vitro showed min. inhibitory concns. 0.96, 0.174, 0.014, 0.117, 17.1, 0.007, and 0.101 .mu.g/mL for 90% of fungal strains, i.e., Aspergillus, Candida albicans, Candida krusei, Candida tropicalis, Candida glabrata, Cryptococcus neoformans, and Dematophytes, resp.

IT **185961-17-5P 185961-19-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenyl(triazolylmethyl)[(piperazinylphenoxy)methyl]tetrahydrofuran derivs. as antifungal agents)

L12 ANSWER 14 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:15702 HCAPLUS
DOCUMENT NUMBER: 128:61523
TITLE: Preparation of 1,4-diphenylpiperazines as medical fungicides
INVENTOR(S): Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-tsung; Ganguly, Ashit K.; Bennett, Frank
PATENT ASSIGNEE(S): Schering Corp., USA
SOURCE: U.S., 40 pp., Cont.-in-part of U.S. Ser. No. 171,083, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5703079	A	19971230	US 1995-460400	19950602
CA 2179396	AA	19950629	CA 1994-2179396	19941220
ZA 9410142	A	19960502	ZA 1994-10142	19941220
CN 1142828	A	19970212	CN 1994-195025	19941220
CN 1064685	B	20010418		
HU 75879	A2	19970528	HU 1996-1709	19941220
IL 112081	A1	20010826	IL 1994-112081	19941220
ES 2159623	T3	20011016	ES 1995-906620	19941220
CN 1161038	A	19971001	CN 1996-190848	19960530
CN 1073109	B	20011017		

PRIORITY APPLN. INFO.: US 1993-171083 B2 19931221
OTHER SOURCE(S): MARPAT 128:61523
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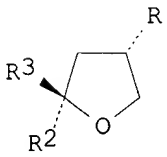

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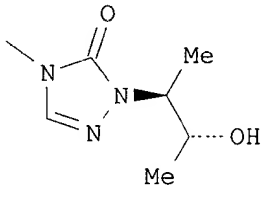


II

AB Title compds. (I; R = CH2OZZ1ZR1; R2 = 1H-1,2,4-triazol-1-ylmethyl; Z = 1,4-phenylene; Z1 = piperazine-1,4-diyl)[II; R1 = (un)esterified 2-hydroxyalkyl-2,4-dihydro-3H-1,2,4-triazol-4-yl; R3 = C6H3Cl2-2,4, C6H3F2-2,4, C6H3FCl-2,4, C6H3FCl-4,2] were prepd. Thus, I (R = OTs, R2 = 1H-1,2,4-triazol-1-ylmethyl, R3 = C6H3F2-2,4)(10 step prepn. given) was

converted in 5 steps to II (R1 = 2,4-dihydro-3H-1,2,4-triazol-4-yl, R3 = C6H3F2-2,4) which was condensed with (R,R)-MeCH(OSO2C6H4Br-4)CH(OCH2OCH2CH2SiMe3)Me (prepn. given) to give II (R1 = hydroxybutyloxotriazolo group III, R3 = C6H3F2-2,4). Data for biol. activity of I were given.

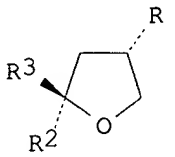
IT **185961-17-5P 185961-19-7P 200346-83-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 1,4-diphenylpiperazines as medical fungicides)

L12 ANSWER 15 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:772292 HCAPLUS
DOCUMENT NUMBER: 128:61524
TITLE: Preparation of 1,4-diphenylpiperazines as medical fungicides
INVENTOR(S): Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-tsung; Ganguly, Ashit K.; Bennett, Frank
PATENT ASSIGNEE(S): Schering Corp., USA
SOURCE: U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 171,083, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

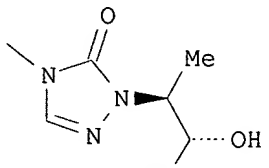
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5693626	A	19971202	US 1995-459145	19950602
CA 2179396	AA	19950629	CA 1994-2179396	19941220
ZA 9410142	A	19960502	ZA 1994-10142	19941220
CN 1142828	A	19970212	CN 1994-195025	19941220
CN 1064685	B	20010418		
HU 75879	A2	19970528	HU 1996-1709	19941220
IL 112081	A1	20010826	IL 1994-112081	19941220
ES 2159623	T3	20011016	ES 1995-906620	19941220
CA 2197672	AA	19961205	CA 1996-2197672	19960530
WO 9638443	A1	19961205	WO 1996-US7547	19960530
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, US, US, UZ, VN, AM, AZ, BY, KG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9659280	A1	19961218	AU 1996-59280	19960530
EP 773941	A1	19970521	EP 1996-916574	19960530
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1161038	A	19971001	CN 1996-190848	19960530
CN 1073109	B	20011017		
IL 118464	A1	20000813	IL 1996-118464	19960530
NO 9701218	A	19970317	NO 1997-1218	19970317

PRIORITY APPLN. INFO.:
US 1993-171083 B2 19931221
US 1995-458543 A 19950602
US 1995-459145 A 19950602
US 1995-459225 A 19950602
WO 1996-US7547 W 19960530

OTHER SOURCE(S): MARPAT 128:61524
GI



I



II

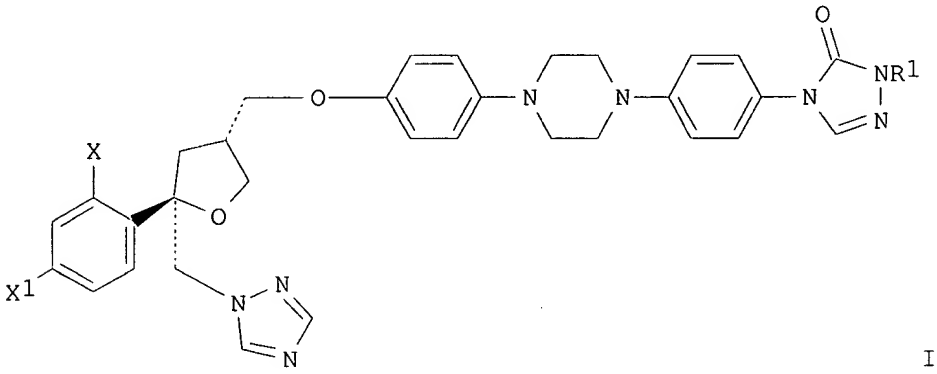
AB Title compds. (I; R = CH2OZZ1ZR1; R2 = 1H-1,2,4-triazol-1-ylmethyl; Z = 1,4-phenylene; Z1 = piperazine-1,4-diyl)[II; R1 = (un)esterified 2-hydroxyalkyl-2,4-dihydro-3H-1,2,4-triazol-4-yl; R3 = C6H3Cl2-2,4, C6H3F2-2,4, C6H3FCl-2,4, C6H3FCl-4,2] were prepd. Thus, I (R = OTs, R2 = 1H-1,2,4-triazol-1-ylmethyl, R3 = C6H3F2-2,4)(10 step prepn. given) was converted in 5 steps to II (R1 = 2,4-dihydro-3H-1,2,4-triazol-4-yl, R3 = C6H3F2-2,4) which was condensed with (R,R)-MeCH(OSO2C6H4Br-4)CH(OCH2OCH2CH2SiMe3)Me (prepn. given) to give II (R1 = hydroxybutyloxotriazolo group III, R3 = C6H3F2-2,4). Data for biol. activity of I were given.

IT **185961-17-5P 185961-19-7P 200346-83-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 1,4-diphenylpiperazines as medical fungicides)

L12 ANSWER 16 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:576603 HCAPLUS
DOCUMENT NUMBER: 127:248124
TITLE: Triazolylphenylpiperazinylphenoxymethyltetrahydrofurans as antifungals
INVENTOR(S): Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-tsung; Ganguly, Ashit K.; Bennett, Frank
PATENT ASSIGNEE(S): Schering Corporation, USA
SOURCE: U.S., 40 pp., Cont.-in-part of U.S. Ser. No. 171,083, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5661151	A	19970826	US 1995-460752	19950602
CA 2179396	AA	19950629	CA 1994-2179396	19941220
ZA 9410142	A	19960502	ZA 1994-10142	19941220
CN 1142828	A	19970212	CN 1994-195025	19941220
CN 1064685	B	20010418		
HU 75879	A2	19970528	HU 1996-1709	19941220
IL 112081	A1	20010826	IL 1994-112081	19941220
ES 2159623	T3	20011016	ES 1995-906620	19941220
CN 1161038	A	19971001	CN 1996-190848	19960530
CN 1073109	B	20011017		

PRIORITY APPLN. INFO.: US 1993-171083 B2 19931221
OTHER SOURCE(S): MARPAT 127:248124
GI



I

AB Title compds. I [X, X1 = F, Cl; R1 = alkyl substituted by one or two hydroxy moieties or an ether or ester thereof] were prepd. for use as antifungal agents. I [X, X1 = F, R1 = (2S,3S)-HOCHMeCHEt] and its esters are claimed. This compd. showed fungicidal activity against a large no. of strains that is much superior to that of fluconazole.

IT **185961-17-5P 185961-19-7P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of triazolylphenylpiperazinylphenoxymethyltetrahydrofurans as antifungals)

L12 ANSWER 17 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:101585 HCAPLUS
DOCUMENT NUMBER: 126:104093
TITLE: Preparation of triazolomethyltetrahydrofurans as medical fungicides
INVENTOR(S): Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-Tsung; Ganguly, Ashit K.; Bennett, Frank
PATENT ASSIGNEE(S): Schering Corporation, USA; Saksena, Anil K.; Girijavallabhan, Viyyoor M.; Lovey, Raymond G.; Pike, Russell E.; Wang, Haiyan; Liu, Yi-Tsung; Ganguly, Ashit K.; Bennett, Frank
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9638443	A1	19961205	WO 1996-US7547	19960530
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, US, US, UZ, VN, AM, AZ, BY, KG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5693626	A	19971202	US 1995-459145	19950602
US 5710154	A	19980120	US 1995-459225	19950602
US 5714490	A	19980203	US 1995-458543	19950602
AU 9659280	A1	19961218	AU 1996-59280	19960530
EP 773941	A1	19970521	EP 1996-916574	19960530
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
NO 9701218	A	19970317	NO 1997-1218	19970317

PRIORITY APPLN. INFO.:

US 1995-458543	A	19950602
US 1995-459145	A	19950602
US 1995-459225	A	19950602
US 1993-171083	B2	19931221
WO 1996-US7547	W	19960530

OTHER SOURCE(S): MARPAT 126:104093

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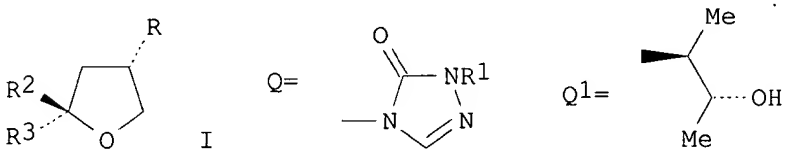


AB Title compds. [I; R = CH2OZZ1ZR4; R2 = 2,4-R5R6C6H3; R3 = 1,2,4-triazol-1-ylmethyl; R4 = oxotriazolo group Q; Z = 1,4-phenylene; Z1 = piperazine-1,4-diyl] (II; R1 = alkyl group substituted by 1 or 2 groups convertible into hydroxy groups; R5,R6 = F, Cl) were prepd. Thus, II (R5 = R6 = F)(III; R1 = H) was alkylated by (R,R)-MeCH(OCH2OCH2CH2SiMe3)CHMeOSO2C6H4Br-4 (prepn. each given) to give, after deprotection, III (R1 = hydroxybutyl group Q1). Data for biol. activity of I were given.

IT **185961-17-5P 185961-19-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of triazolomethyltetrahydrofurans as medical fungicides)

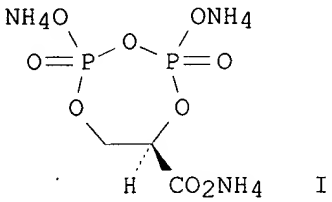
L12 ANSWER 18 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:449890 HCAPLUS
DOCUMENT NUMBER: 125:222305
TITLE: Large Scale Synthesis of Cyclodiphospho-D-glycerate
AUTHOR(S): Earle, Martyn J.; Abdur-Rashid, Asiya; Priestley, Nigel D.
CORPORATE SOURCE: College of Pharmacy, Ohio State University, Columbus, OH, 43210-1291, USA
SOURCE: Journal of Organic Chemistry (1996), 61(16), 5697-5700
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:222305

AB A simple, reproducible, and efficient synthesis of the methanogen primary metabolite cyclo-diphospho-D-glycerate (cDPG) has been developed. Until now, much work on the biochem. and biophysics of methanogen protein and nucleic acids has been hampered by the lack of a simple route to cDPG. Starting from mannitol, cDPG was made in ten steps in greater than 30% overall yield. The synthesis, with little modification, is capable of producing the target compd. on multi-gram scales. 2,3-Bisphospho-D-glycerate can also be made on a large scale by slight modification of the procedure.

IT **180794-78-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(large scale synthesis of cyclodiphosphoglycerate from mannitol)

L12 ANSWER 19 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:55488 HCAPLUS
DOCUMENT NUMBER: 124:232950
TITLE: A synthesis of cyclo-2,3-diphospho-D-glycerate from

D-mannitol
AUTHOR(S): Berkessel, Albrecht; Geisel, Urs; Herault, David A.
CORPORATE SOURCE: Organisch-Chemisches Inst., Ruprecht-Karls-Universitaet, Heidelberg, D-69120, Germany
SOURCE: Tetrahedron Letters (1996), 37(3), 355-56
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:232950
GI



I

AB Cyclo-2,3-diphospho-D-glycerate (c-DPG) I was synthesized from D-mannitol in seven steps on a gram-scale. Key feature of the synthetic route is the intramol. cyclocondensation of Me 2,3-diphospho-D-glycerate using dicyclohexylcarbodiimide. The prepn. described makes the natural product c-DPG available on a larger scale for the first time.

IT **174647-48-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of cyclodiphosphoglycerate from mannitol via intramol. cyclocondensation of diphosphoglycerate)

L12 ANSWER 20 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:928187 HCAPLUS
DOCUMENT NUMBER: 124:30072
TITLE: Phosphonoxy and carbonate derivatives of taxol.
INVENTOR(S): Ueda, Yasutsugu; Farina, Vittorio; Vyas, Dolatrai M.; Wong, Henry; Mikkilineni, Amarendra; Doyle, Terrence
PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA
SOURCE: S. African, 265 pp.
CODEN: SFXXAB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 9300744	A	19930907	ZA 1993-744	19930203
AU 9332156	A1	19930819	AU 1993-32156	19930202
AU 651027	B2	19940707		
HU 63400	A2	19930830	HU 1993-274	19930203
NO 9300388	A	19930816	NO 1993-388	19930204
CA 2088931	AA	19930814	CA 1993-2088931	19930205
EP 558959	A1	19930908	EP 1993-102019	19930209
EP 558959	B1	19970416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 151762	E	19970515	AT 1993-102019	19930209
ES 2099851	T3	19970601	ES 1993-102019	19930209
JP 06001782	A2	19940111	JP 1993-44306	19930210
JP 3261548	B2	20020304		

PRIORITY APPLN. INFO.: US 1992-836623 A 19920213
US 1992-836621 A 19920213
US 1992-981151 A 19921124
OTHER SOURCE(S): MARPAT 124:30072
AB 2'- And 7-O-phosphonates and carbonates of taxol were prepd. Thus, taxol was 2'-O-benzyloxycarbonylated and treated with 4,6,2-Me2[(PhCH2O)2P(O)O]C6H2CMe2CH2CO2H, prepd. from 3,5-Me2C6H3OH and Me2C:CHCO2CH2Ph in 7 steps, followed by deblocking to give 7-O-[3-(2-phosphonooxy-4,6-dimethylphenyl)-3,3-dimethylpropionyl]taxol di-Na salt (I). I had T/C 156% at 140 mg/kg twice against M109 lung carcinoma.
IT **170555-38-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antitumor activity of taxol carbonates and phosphonates)
IT **170436-83-6P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antitumor activity of taxol carbonates and phosphonates)

L12 ANSWER 21 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:136608 HCAPLUS
DOCUMENT NUMBER: 122:159073
TITLE: Modification of casein by the plastein reaction
AUTHOR(S): Lorenzen, P. Chr.
CORPORATE SOURCE: Institut fur Chemie und Physik der Bundesanstalt fur Milchforschung, Kiel, Germany
SOURCE: Kieler Milchwirtschaftliche Forschungsberichte (1994), 46(2), 179-90
CODEN: KMWFAF; ISSN: 0023-1347
PUBLISHER: Verlag Th. Mann
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Covalent binding of amino acid Et ester (Met-, Ser-, and PSer-OEt) to caseinopeptides is possible by means of the plastein reaction and also in the course of simple proteolysis. The properties of plasteins obtained with pancreatin as a physiol. enzyme system differ markedly from serine proteinase plasteins reflecting the influence of peptidases on plastein formation. Proteolysis-resistant peptides are concd. within pancreatin plasteins, which consist two thirds of hydrophobic amino acids, esp. tyrosine (approx. 35 mol %). One-phase and two-phase pancreatin plasteins exhibit almost identical functional and structural properties. Differences in the distribution of peptide mol. wts. are particularly apparent. In the two-phase system (ethanol/water) plastein material with a molar mass > 5000 g/mol is formed, that is not dissolved by 8 mol/L urea or by boiling in solns. contg. SDS-and dithiothreitol.
IT **98139-38-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(covalent binding of protected amino acids to casein peptides)

L12 ANSWER 22 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:65821 HCAPLUS
DOCUMENT NUMBER: 120:65821
TITLE: Electrophotographic light-sensitive material
INVENTOR(S): Kato, Eiichi; Ishii, Kazuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 93 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 533135	A1	19930324	EP 1992-115839	19920916
EP 533135	B1	19980610		
R: DE, GB				
JP 05072756	A2	19930326	JP 1991-262508	19910917
JP 3112725	B2	20001127		
JP 05150465	A2	19930618	JP 1991-335810	19911127
JP 3112730	B2	20001127		

PRIORITY APPLN. INFO.: JP 1991-262508 A 19910917
JP 1991-335810 A 19911127

AB An electrophotog. light-sensitive material is described comprising a support having provided thereon .gtoreq.1 photoconductive layer contg. an inorg. photoconductive substance, a spectral sensitizing dye, and a binder resin, wherein the binder resin comprises at least one resin (A) shown below and at least one resin (B) shown below. The resin A is a starlike copolymer having a wt.-av. mol. wt. of 1 .times. 103-2 .times. 104 and comprising an org. mol. having bonded thereto .gtoreq.3 polymer chains each contg. a component (a) CH(a1)C(a2)(CO2R11) (a1, a2 = H, halogen, CN, or hydrocarbyl; R11 = hydrocarbyl) and a component (b) contg. at least one polar group selected from PO3H2, SO3H, COOH, and P(O)(OH)R1 (R1 = hydrocarbyl or OR2; R2 = hydrocarbyl) and a cyclic acid anhydride-contg. group, wherein the content of the polymer component a is not less than 30% by wt. and the content of the polymer component b is from 1 to 20% by wt. The resin B has a wt.-av. mol. wt. of from 3 .times. 104 to 1 .times. 106 and contains not less than 30% by wt. of CH(c1)C(c2)(X2R13) (c1, c2 = a1; X2 = (CH2)rCOO, (CH2)rOCO, O, or CO; r = an integer of 0-3; R13 = hydrocarbyl). The electrophotog. light-sensitive material exhibits excellent electrostatic characteristics (particularly, under severe conditions) and mech. strength and provides clear images of good quality. It is suitable for producing a lithog. printing plate. Also, it is advantageously employed in a scanning exposure system using a semiconductor laser beam.

IT **152222-66-7DP**, reaction product with azobiscyanovaleric acid
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and use of, in electrophotog. photoreceptor)

L12 ANSWER 23 OF 30 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:	1993:622612 HCAPLUS
DOCUMENT NUMBER:	119:222612
TITLE:	Human erythrocyte membrane lipid asymmetry: Transbilayer distribution of rapidly diffusing phosphatidylserines
AUTHOR(S):	Loh, R. K.; Huestis, Wray H.
CORPORATE SOURCE:	Dep. Chem., Stanford Univ., Stanford, CA, 94305, USA
SOURCE:	Biochemistry (1993), 32(43), 11722-6 CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB Human erythrocytes were incubated with sonicated vesicles composed of diheptanoyl-, dioctanoyl-, didecanoyl-, or dimyristoylphosphatidylserine, and the transbilayer distribution of the incorporated foreign lipid was examd. by monitoring changes in cell morphol. Cells incubated with all phosphatidylserine homologs crenated initially and then reverted to discoid and stomatocytic morphol. Cells exposed to didecanoyl- or dimyristoylphosphatidylserine retained stable stomatocytic morphol. during >10 h of incubation at 37.degree.. Cells exposed to the diheptanoyl or dioctanoyl homologs reverted from stomatocytes to diskocytes within 1-4 h. This reversion was more rapid for the shorter acyl chain diheptanoylphosphatidylserine. Reversion was accelerated in both cases by vanadate, an inhibitor of the aminophospholipid translocator. Heat denaturation of cytoskeletal proteins had no effect on

phosphatidylserine-induced stomatocytosis or on the reversion to discoid shape of cells exposed to the short-chained homologs. These observations suggest that the aminophospholipid transporter rather than cytofacial lipid-binding sites plays the primary role in maintenance of phosphatidylserine asymmetry in the erythrocyte membrane bilayer.

IT **61103-36-4**, Dioctanoylphosphatidylserine
RL: BIOL (Biological study)
(of erythrocyte membrane, of human, transbilayer distribution and morphol. in relation to)

L12 ANSWER 24 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:17901 HCAPLUS
DOCUMENT NUMBER: 92:17901
TITLE: Inactivation of inorganic pyrophosphatase from yeasts by o-phosphoserine and its methyl ester
AUTHOR(S): Svyato, I. E.; Sklyankina, V. A.; Avaeva, S. M.
CORPORATE SOURCE: Mosk. Gos. Univ., Moscow, USSR
SOURCE: Vestn. Mosk. Univ., Ser. 2: Khim. (1979), 20(5), 479-84
CODEN: VMUKA5; ISSN: 0579-9384
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB O-Phosphoserine Me ester (I) was a specific, irreversible inhibitor of yeast inorg. pyrophosphatase; 1 h incubation of enzyme with 10-3M I resulted in total inactivation. The reaction of I with enzyme was biphasic. K pyrophosphate gave complete protection against inhibition by I, indicating that I reacts with the enzyme active site. The Ki for I was 0.4 mM. The rate of inhibition by I was very low at pH 7.5-8.5 and sharply increased on transition to the acid zone, pH 7.5-6.25, and then remained const. Protonation of an enzyme group with pK of 6.35 increases the rate of enzyme inactivation. Fully inactivated enzyme contained 1 mol I/subunit (2 mol/mol enzyme). Imidazole treatment of I-inactivated enzyme caused a partial reactivation (50%). Apparently, I-modified pyrophosphatase contains 2 types of bonds with the reagent: acylphosphate and amide. O-Phosphoserine (II) was also an effective inhibitor of the enzyme but its effects were fully reversible on diln. The modified enzyme contained 0.5 mol II/mol protein. Inhibition by II was also due to formation of an acylphosphate enzyme. Thus, the presence of a free carboxyl group on II changes the nature of inhibition.

IT **6401-59-8**
RL: BIOL (Biological study)
(inorg. pyrophosphatase of yeast inhibition by)

L12 ANSWER 25 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1976:588548 HCAPLUS
DOCUMENT NUMBER: 85:188548
TITLE: Separation of brain phosphatidylserines according to degree of unsaturation by thin-layer chromatography
AUTHOR(S): Salem, Norman, Jr.; Abood, Leo G.; Hoss, Wayne
CORPORATE SOURCE: Cent. Brain Res., Univ. Rochester, Rochester, N. Y., USA
SOURCE: Anal. Biochem. (1976), 76(2), 407-15
CODEN: ANBCA2
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Phosphatidylserines (PS) were prepd. from bovine brain by using DEAE-cellulose column chromatog. A method involving AgNO3-impregnated silica gel H thin-layer chromatog. is described for sepg. intact PS according to the degree of unsatn. of their fatty acids. A detailed anal. was made of the fatty acid compn. of the various fractions by using gas chromatog. Some data are presented on the compn. of mol. species of PS in bovine brain. The 2 main mol. species found in cerebral cortex are tentatively assigned the structures of 1-octadecanoyl-2-docosahexaenoyl-sn-

glycero-3-phosphorylserine and 1-octadecanoyl-2-octadecenoyl-sn-glycero-3-phosphorylserine.

IT **61103-35-3 61103-37-5**
RL: ANST (Analytical study)
(sepn. and identification of, in brain)

L12 ANSWER 26 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1972:46490 HCAPLUS
DOCUMENT NUMBER: 76:46490
TITLE: Hydrolysis of the methyl ester of O-phosphoserine
AUTHOR(S): Avaeva, S. M.; Sklyankina, V. A.
CORPORATE SOURCE: Mosk. Gos. Univ., Moscow, USSR
SOURCE: Zh. Obshch. Khim. (1971), 41(9), 2081-5
CODEN: ZOKHA4
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI For diagram(s), see printed CA Issue.
AB Hydrolysis of the Me ester of O-phosphoserine at 100.degree. in H2O or various buffers (citrate, phosphate, hydroxylamineacetate) gave largely Me ester of serine with a moderate amt. of O-phosphoserine and free H3PO4. The results were tabulated and rate consts. reported for pH 6.1 to 7.1. The very rapid hydrolysis in the pH 5-8 interval was noted with the reaction being accelerated by both acids and bases. Probably a cyclic intermediate transition state such as I takes part.
IT **6401-59-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L12 ANSWER 27 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1969:84504 HCAPLUS
DOCUMENT NUMBER: 70:84504
TITLE: Phosphoryl transfer from S-substituted monoesters of phosphorothioic acid to various acceptors catalyzed by alkaline phosphatase from Escherichia coli
AUTHOR(S): Neumann, Hava
CORPORATE SOURCE: Texas A and M Univ., College Station, Tex., USA
SOURCE: Eur. J. Biochem. (1969), 8(2), 164-73
CODEN: EJBCAI
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Alk. phosphatase (E. coli) catalyzed the synthesis of monophosphate esters of serine, ethanolamine, propanolamine, butanol, glycerol, L-glucose, and Tris by phosphoryl transfer from cysteamine S-phosphate (donor) to the resp. alcs. (acceptors). Max. enzymic synthesis of the above esters occurred at pH 7.8. The newly-formed phosphate esters were measured quant. after sepn. of the products by the aid of paper high voltage electrophoresis techniques or by an amino acid analyzer. The percentage of the enzyme-catalyzed synthesis of the new phosphate esters varied from 15 to 39% using different acceptors under otherwise identical exptl. conditions. It is pertinent to note that the same compds. were phosphorylated to essentially the same extent when the donor (substrate) compd. was serine O-phosphate, aminoethanol O-phosphate, or p-nitrophenyl O-phosphate. The rates of enzymic consumption of cysteamine S-phosphate were measured at different pH values and at different concns. of acceptor (Tris or aminoethanol) in the presence of 1.5M NaCl, using 3mM substrate (cysteamine S-phosphate). The presence of either Tris or aminoethanol gave the same pH profile for the rate of consumption of cysteamine S-phosphate with a max. value .apprx.pH 7.8. This value differs from that found for the same reaction in barbital buffer (pH 9.0). The rate of enzymic consumption of cysteamine S-phosphate was also measured at various substrate and Tris concns. at pH 7.8 under const. ionic strength. The same Km value (0.24mM) was obtained at Tris concns. varying from 0.02 to 0.5M. The Vmax values derived from these expts. were linearly related to

the Tris concns. up to 0.5M. The pH profile of the rate of consumption of p-nitrophenyl phosphate, as well as the Km value (0.26mM) were similar to the corresponding values obtained for cysteamine S-phosphate. The rate of hydrolysis could not be measured when cysteamine S-phosphate served as the donor compd. due to the instability of cysteamine S-phosphate under the conditions required for inorg. phosphate assay. Therefore, the rate of transfer could not be estd. The pH dependence of the rate of transfer was calcd. from exptl. data obtained when p-nitrophenyl phosphate served as the donor compd. and Tris served as the acceptor. The pH profile for the rate of transfer obtained from these measurements was very similar to that obtained by direct measurement of Tris O-phosphate formation using cysteamine as the donor. It is suggested that phosphoryl transfer occurs through a phosphorylated enzyme intermediate, and therefore, the types of compds. that could serve as acceptors are independent of the donor compds. and depend only on the bond energy of the particular phosphorylated enzyme intermediate.

IT **6401-59-8**
RL: FORM (Formation, nonpreparative)
(formation of, by phosphoryl transfer activity of alk. phosphatase)

L12 ANSWER 28 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1968:46881 HCAPLUS
DOCUMENT NUMBER: 68:46881
TITLE: Application of chromatography to the study of the natural guanidines and phosphagens
AUTHOR(S): Robin, Yvonne; Nguyen-Van-Thoai
CORPORATE SOURCE: College de France, Paris, Fr.
SOURCE: Bull. Soc. Chim. Fr. (1967), (10), 3965-71
CODEN: BSCFAS
DOCUMENT TYPE: Journal
LANGUAGE: French

AB The sepn. and isolation of substituted guanidines HN:C(NH2)NHR (I) and phosphagens (II) extd. from animal tissues or urine was achieved by chromatographic techniques. The I sepd. were guanidinoethanesulfonic acid (III) (taurocyamine), guanidinoethanesulfinic acid (hypotaurocyamine), guanidinoethylserylphosphoric acid I (R = CH2CH2OP(O)(OH)OCH2CH(NH2)(CO2H) (IV), guanidinoethyl Me phosphoric acid (V), guanidinobutyramide, diamidinospermidine (VI), diamidinocadaverine, and .beta.-guanidinoisobutyric acid. II isolated were phosphoglycocyamine, phosphotaurocyamine, phosphohypotaurocyamine, phospholombricine, and phosphoopheline. The characteristic color reactions for substituted I and II were reviewed. Paper and thin-layer chromatographic techniques using the following solvent systems were discussed: pyridine-iso-amyl alc.-AcOH-H2O (8:4:1:4), BuOH-pyridine-AcOH-H2O (3:3:3:1), or PrOH-amyl alc-H2O (73:20:7). Ion-exchange resins were used successfully to sep. I or II from tissues. Ion-retardation resin AG 11A8 was used to sep. I from mineral salts in urine. Acid-treated Dowex 50 was used to sep. III and V from marine animal tissues. Dowex 50 treated with HCO2H-pyridine mixt. sepd. IV and Urechis caupo at pH 2.6. Amberlite 120 at pH 7 was used for sepn. of octopine and arginine from mollusk exts. Amberlite IRC 50 at pH 7 was used to sep. VI of leech, Hirudo medicinalis. Cellulose, dextran, or cellulose phosphate columns were used successfully for I and II sepns.

IT **18555-02-7**
RL: PROC (Process)
(chromatographic isolation of)

L12 ANSWER 29 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1967:83453 HCAPLUS
DOCUMENT NUMBER: 66:83453
TITLE: Biogenesis of guanidine derivatives in Audouinia tentaculata
AUTHOR(S): Robin, Yvonne; Oriol-Audit, Christian
CORPORATE SOURCE: College de France, Paris, Fr.

SOURCE: C. R. Seances Soc. Biol. Ses Fil. (1966), 160(7), 1410-14
CODEN: CRSBAW
DOCUMENT TYPE: Journal
LANGUAGE: French
AB A. tentaculata, a polychaete worm, incorporated activity from arginine-amidino-14C into the guanidine derivs. glycocyamine, creatine, taurocyamine, lombricine, arcaine (1,4-diamidinoputrescine), and audouine in vivo, suggesting that the biogenesis of guanidine derivs. occurs by similar mechanisms in invertebrates and vertebrates.
IT **16657-65-1**
RL: BIOL (Biological study)
(formation by Audouinia tentaculata)

L12 ANSWER 30 OF 30 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1963:482475 HCAPLUS
DOCUMENT NUMBER: 59:82475
ORIGINAL REFERENCE NO.: 59:15370f-h,15371a-c
TITLE: Sugar esters. II. Structure of alkali-stable phosphate esters obtained in alkali treatment of sugar diphosphates and cyclic phosphates
AUTHOR(S): Lee, J. B.
CORPORATE SOURCE: Coll. Advanced Technol., Lough borough, UK
SOURCE: J. Org. Chem. (1963), 28(9), 2473-5
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. CA 55, 27074g. D-Fructose 1,6-diphosphate (I) (1.98 g.) in 10 ml. H2O degassed and treated with 150 ml. degassed 0.46N NaOH (O-free N atm.), the mixt. heated under a slow stream of N 15 min. on a steam bath, and the CO2-neutralized mixt. examd. by two-dimensional paper chromatography and two-dimensional paper chromatography-ionophoresis using a variety of solvents and developers showed the presence of at least 21 distinct components. The mixt. passed through an anion exchange column and eluted with aq. H2B4O7, the phosphate-contg. fractions combined, the residue on evapn. fractionated on several thicknesses of paper eluted with 1:5:1 C5H5N-BuOH-H2O (sol vent E) or 1:8:1 AcOH-BuOH-H2O (solvent F), the product finally fractionated by electrophoresis, and the homogeneous material paper chromatographed with solvents A (4: 1: 5 BuOHCHCl3-H2O), E, and F gave glucosaccharinic acid 6-phosphate (II), C6H13O9P, [.alpha.] 20D 62.degree. (c 0.09, H2O), .lambda.' 2.9-3.1, 3.7, 5.65, 8.22, 9.65 .mu.; p-bromophenacyl ester m. 157-8.degree.. II reduced hot acidified dichromate and permanganate solns. and gave pos. tests for .alpha.-OH acids, but reacted negatively towards Fehling, Tollens, Schiff, and Brady reagents. II hydrolyzed 30 min. at 100.degree. with N aq. NaOH or with 0.1N aq. HCl gave <8% and approx. 25% inorg. phosphate, resp. II consumed 1 mole NaIO rapidly, a 2nd mole in 24 hrs., and slowly consumed a 3rd mole, suggesting a C-Me group with (probably) 3 adjacent OH groups. II (0.08 g.) in 5 ml. H2O kept 24 hrs. in the dark with 0.06 M aq. NaIO4 (2 molar equivs.) and the residue on freeze-drying extd. with Et2O gave AcCO2H, characterized as the 2,4-dinitrophenylhydrazone, m. 213-14.degree., and p-bromophenacyl ester, m. 117-18.degree.. Some glycolaldehyde phosphate was detected chromatographically. II treated with o-H2NC6H4NH2 in AcOH gave a salt, which regenerated the base on treatment with alkali. II (0.17 g.) in 5 ml. aq. NaOBr kept 20 hrs. at 20.degree. and the soln. percolated through Amberlite IR-120 (H+ form), the residue on evapn. examd. by two-dimensional paper chromatography, ionophoresis, and the chromatograms developed by a modified Hanes-Isherwood reagent (loc. cit.) showed the presence of Derythronic acid 4-phosphate, characterized as the p-bromophenacyl ester, m. 182-3.degree.. Galactose 4,6-phosphate (III) subjected to alk. hydrolysis gave the isosaccharinic acid phosphate (IV). Careful reduction of the lactones of the saccharinic and isosaccharinic acid phosphates produced branched chain sugar

phosphates and, by suitable modification, might afford a useful route to these compds.
IT **91720-64-8**, Erythronic acid, ester with 4'-bromo-2-hydroxyacetophenone, 4-phosphate
(prepn. of)

=> fil caold
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=>
=>

=> s l11
L13 15 L11

=> d all l13 1-15

L13 ANSWER 1 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA65:2346f CAOLD
TI synthesis of phosphopeptides - (V) dipeptides, tripeptides, and O-phosphorylated derivs. of L-serine
AU Folsch, Georg
IT 687-63-8 1114-81-4 1738-88-1 2764-32-1 2764-33-2 4864-20-4
5513-86-0 5513-88-2 5694-04-2 5694-28-0 5875-38-7 6376-99-4
6377-23-7 6377-24-8 6401-26-9 6401-27-0 6401-28-1 6401-29-2
6401-59-8 **6401-60-1** 6401-61-2 6401-62-3
6402-92-2 6402-93-3 6402-94-4 6402-95-5 6402-97-7 6402-98-8
6403-03-8 6403-04-9 6403-05-0 6403-06-1 6403-07-2 6403-09-4
6403-10-7 6403-11-8 6403-13-0 6403-14-1 6403-15-2 6403-16-3
6403-17-4 6403-19-6 6403-20-9 6403-21-0 6403-22-1 6403-23-2
6403-25-4 6403-26-5 6510-99-2 6511-00-8 6511-01-9 6511-02-0
6511-05-3 6511-06-4 6511-07-5 6546-89-0 6551-18-4 6659-14-9
6659-15-0 6659-18-3 6659-19-4 6665-19-6 6665-28-7 6690-86-4
6746-82-3 6868-48-0 13254-31-4 27527-37-3 94438-06-9 94683-15-5
94730-97-9 96373-26-1 97358-36-6 107156-63-8

L13 ANSWER 2 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA64:13028a CAOLD
TI isolation of .beta.-galactosidase and .beta.-glucosidase from brain
AU Gatt, Shimon; Rapport, M. M.
IT 543-18-0 2426-46-2 2492-87-7 3150-24-1 4189-99-5
14960-19-1

L13 ANSWER 3 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA64:5369g CAOLD

TI hydrolysis of phosphopeptides - (III) action of alk. phosphatase prepns. from kidney, bone, and yeast on O-phosphorylated model
AU Csopak, Hedvig; Folsch, G.; Strid, L.; Mellander, O.
IT 1114-81-4 3695-66-7 6064-83-1 6377-00-0 6401-28-1
6401-60-1 6401-62-3 6403-04-9 6659-14-9 6659-15-0
6659-18-3 6659-19-4 6665-27-6 6665-28-7 6665-33-4 6665-42-5
6690-86-4 10009-54-8 10009-61-7 90940-43-5 92063-91-7

L13 ANSWER 4 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA63:18250c CAOLD
TI photoalkylation of glycine derivs.
AU Elad, Dov; Sinnreich, J.
TI protonation equil. and alk. hydrolysis of glycine ethyl ester
AU Wright, Margaret R.
IT 459-73-4 2226-83-7 2375-06-6 4071-34-5 4071-35-6 4071-36-7
4134-09-2 4275-95-0 4276-03-3 5143-48-6 **6401-60-1**
35433-66-0 57772-79-9 57772-80-2 91108-82-6 91694-63-2

L13 ANSWER 5 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA61:2164h CAOLD
TI paper chromatography of biol. important guanidines
AU Pant, Radha; Agrawal, H. C.
IT 471-29-4 499-45-6 503-69-5 543-18-0 543-83-9 544-05-8
1119-69-3 2465-97-6 4353-52-0 4381-80-0 6249-86-1 13551-03-6
13551-09-2 **14960-19-1** 34522-32-2 69928-56-9 89617-72-1
89919-92-6 91364-31-7 91568-61-5 92306-67-7

L13 ANSWER 6 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA60:16119g CAOLD
TI electron paramagnetic resonance in free radicals of biol. systems
AU Mochalkin, A. I.; Rik, G. R.
TI lombricine and serine ethanolamine phosphodiester
AU Ennor, A. H.; Rosenberg, H.
IT **14960-19-1** 16106-21-1

L13 ANSWER 7 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA60:4505g CAOLD
TI chromatology pigmentation of crustacean parasites
AU Nadakal, A. M.
IT **14960-19-1**

L13 ANSWER 8 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA60:4393a CAOLD
TI purification and properties of adenosine triphosphatelombricine phosphotransferase
AU Gaffney, T. J.; Rosenberg, H.; Ennor, A. H.
IT **14960-19-1**

L13 ANSWER 9 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA59:15371c CAOLD
TI synthesis of the anomeric 7-D-ribofuranosyladenines and the identification of the nucleoside from pseudo vitamin B12
AU Montgomery, John A.; Thomas, H. J.
IT 485-08-5 1168-39-4 2641-50-1 4710-71-8 5517-59-9 7280-81-1
7280-88-8 13408-75-8 67012-41-3 **91720-64-8** 91740-36-2

L13 ANSWER 10 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA53:22157f CAOLD
TI apparent acid ionization consts. of o-phosphorylated peptides and related compds.
AU Foelsch, Georg; Oesterberg, R.
IT 407-41-0 1071-23-4 2543-39-7 2789-31-3 6366-66-1
6401-59-8 6659-22-9 6665-16-3 6665-27-6 6665-42-5

10009-61-7 90940-43-5 99362-01-3 100227-06-3 100256-18-6 101310-95-6
101938-05-0

L13 ANSWER 11 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA53:10340c CAOLD
TI formation of the methylthiol ester of 3-phosphoglyceric acid catalyzed by glyceraldehyde-3-phosphate dehydrogenase
AU Wolff, Edith C.; Black, S.
IT **118685-92-0**

L13 ANSWER 12 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA53:376f CAOLD
TI formation and transformation of esters - (XII) influence of various functional groups on the hydrolysis of primary phosphoric esters
AU Cherbuliez, Emile; Probst, H.; Rabinowitz, J.; Sandrin, S.
IT 628-22-8 999-10-0 1071-23-4 6909-61-1 7084-58-4 39942-10-4
89280-66-0 89695-51-2 **98275-36-6** 98279-24-4 102153-74-2
102154-04-1 108482-11-7 114062-76-9 114062-81-6 114252-63-0
117146-84-6

L13 ANSWER 13 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA51:13759g CAOLD
TI synthesis of phosphorylated aminohydroxy acids and derived peptides related to the phosphoproteins
AU. Riley, G.; Turnbull, J. H.; Wilson, W.
IT 407-41-0 1114-81-4 3695-66-7 3695-68-9 5618-95-1 6665-42-5
13244-10-5 13515-86-1 23161-27-5 26582-86-5 39692-63-2 89019-92-1
91199-29-0 **98139-38-9** 101784-73-0 101914-11-8 103211-49-0
110441-77-5 120089-67-0 120176-13-8 121426-50-4

L13 ANSWER 14 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA51:3447g CAOLD
TI formation and transformation of esters - (VIII) prepn. of aminoalkylphosphoric acids and their N-acylated derivs., (IX) phosphorylation of hydroxy acids by polyphosphoric acids
AU Cherbuliez, Emile; Rabinowitz, J.
IT 701-64-4 790-12-5 1071-23-4 1071-28-9 5015-38-3 7564-68-3
10389-04-5 58389-61-0 65424-63-7 89416-70-6 89603-45-2 89695-74-9
98139-37-8 98275-63-9 98275-64-0 105105-26-8 108016-34-8 108130-61-6
108130-97-8 **108211-07-0** 108629-01-2 108799-36-6 108799-37-7
108995-13-7 109818-68-0 110489-16-2 112442-81-6 112442-82-7 114252-62-9
114538-39-5 116605-86-8 116636-27-2 117069-79-1 117099-06-6 117099-10-2
117100-47-7 117100-48-8 117122-97-1 117756-62-4 117879-62-6 117886-77-8
117887-31-7 118727-96-1 118766-23-7

L13 ANSWER 15 OF 15 CAOLD COPYRIGHT 2002 ACS
AN CA51:1345b CAOLD
TI enzymic formation of glyceryl and phosphoglyceryl methylthiol esters
AU Black, Simon; Wright, N. G.
IT 820-11-1 **118685-92-0**

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http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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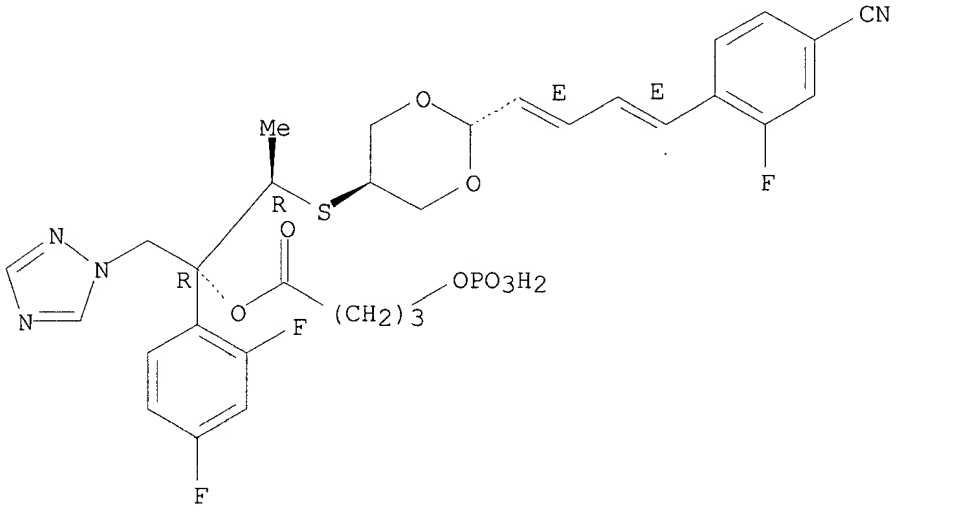
L11 ANSWER 1 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 452977-80-9 REGISTRY
CN INDEX NAME NOT YET ASSIGNED
FS STEREOSEARCH
MF C31 H32 F3 N4 O8 P S . 2 Na
SR CA
LC STN Files: CAPLUS

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 2-A

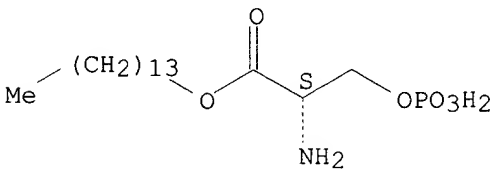
2 Na

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L11 ANSWER 2 OF 35 REGISTRY COPYRIGHT 2002 ACS

RN 384347-98-2 REGISTRY
CN L-Serine, tetradecyl ester, dihydrogen phosphate (ester) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN VPC 22053
FS STEREOSEARCH
MF C17 H36 N O6 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



€ pub 2002 + 2001

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

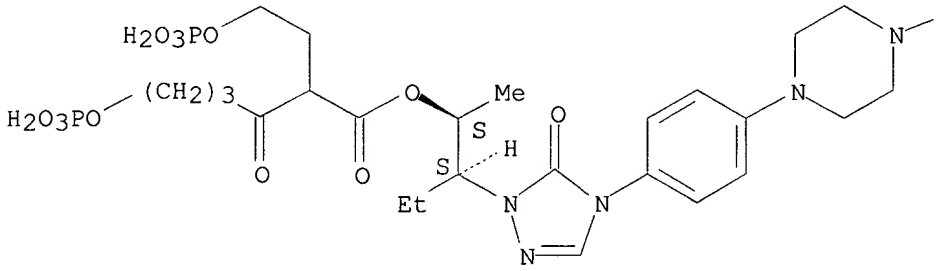
REFERENCE 1: 137:185830

REFERENCE 2: 136:65824

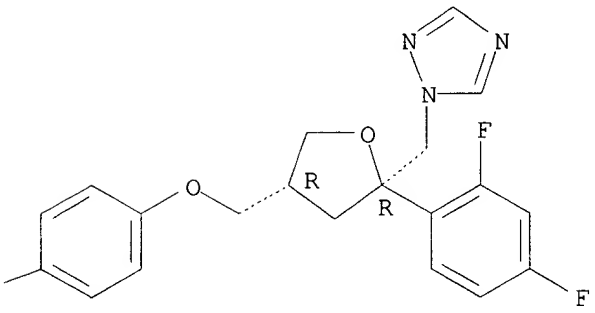
L11 ANSWER 3 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 383428-68-0 REGISTRY
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-2-[[1,3-dioxo-6-(phosphonooxy)-2-[2-(phosphonooxy)ethyl]hexyl]oxy]-1-ethylpropyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C45 H56 F2 N8 O14 P2
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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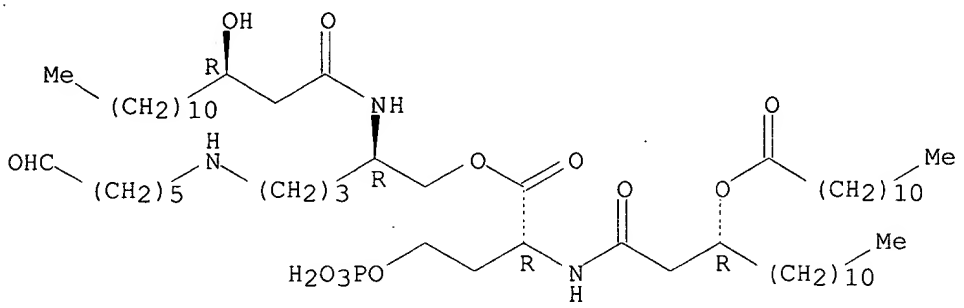
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:71495

L11 ANSWER 4 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 346670-29-9 REGISTRY
CN Dodecanoic acid, (1R)-1-[2-[[(1R)-1-[[(2R)-2-[[(3R)-3-hydroxy-1-oxotetradecyl]amino]-2-[3-[(6-oxohexyl)amino]propyl]ethoxy]carbonyl]-3-(phosphonooxy)propyl]amino]-2-oxoethyl]dodecyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C55 H106 N3 O12 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

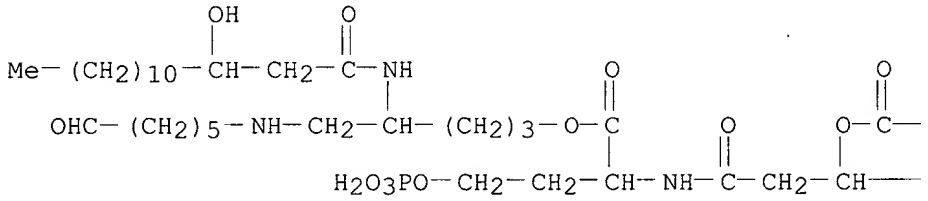


1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:77104

L11 ANSWER 5 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 346670-23-3 REGISTRY
CN Dodecanoic acid, 1-[2-[[1-[[4-[(3-hydroxy-1-oxotetradecyl)amino]-4-[[(6-oxohexyl)amino]methyl]butoxy]carbonyl]-3-(phosphonooxy)propyl]amino]-2-oxoethyl]dodecyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C55 H106 N3 O12 P
SR CA
LC STN Files: CA, CAPLUS

PAGE 1-A



PAGE 1-B

—— $(CH_2)_{10}$—Me

— $(CH_2)_{10}$—Me

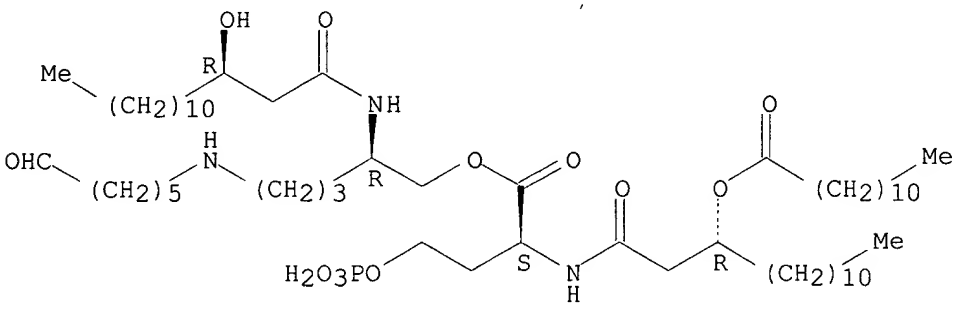
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:77104

L11 ANSWER 6 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 346670-09-5 REGISTRY
CN Dodecanoic acid, (1R)-1-[2-[[(1S)-1-[[(2R)-2-[[(3R)-3-hydroxy-1-oxotetradecyl]amino]-2-[3-[(6-oxohexyl)amino]propyl]ethoxy]carbonyl]-3-(phosphonooxy)propyl]amino]-2-oxoethyl]dodecyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH
MF C55 H106 N3 O12 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

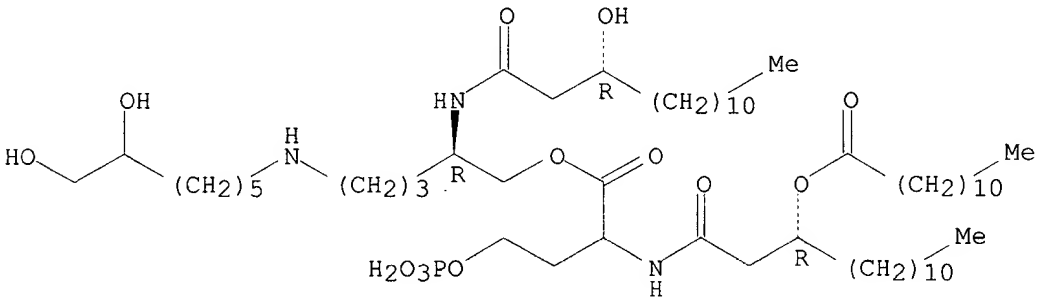


1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:77104

L11 ANSWER 7 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 346670-08-4 REGISTRY
CN Dodecanoic acid, (1R)-1-[2-[[1-[[(2R)-2-[3-[(6,7-dihydroxyheptyl)amino]propyl]-2-[[(3R)-3-hydroxy-1-oxotetradecyl]amino]ethoxy]carbonyl]-3-(phosphonooxy)propyl]amino]-2-oxoethyl]dodecyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C56 H110 N3 O13 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:77104

L11 ANSWER 8 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 262266-08-0 REGISTRY
CN D-Glucitol, 1-deoxy-1-(methylamino)-, compd. with 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[1-oxo-4-(phosphonooxy)butoxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-D-threo-pentitol (2:1) (9CI) (CA INDEX NAME)

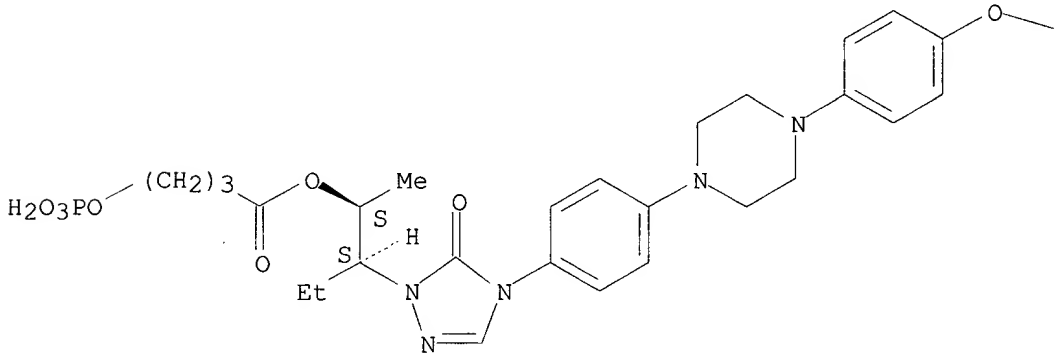
OTHER CA INDEX NAMES:
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[1-oxo-4-(phosphonooxy)butoxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-, compd. with 1-deoxy-1-(methylamino)-D-glucitol (1:2) (9CI)
FS STEREOSEARCH
MF C41 H49 F2 N8 O9 P . 2 C7 H17 N O5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

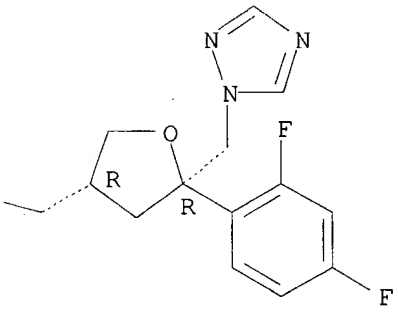
CRN 200346-83-4
CMF C41 H49 F2 N8 O9 P

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

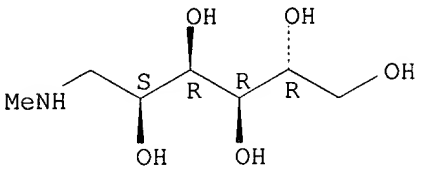


CM 2

CRN 6284-40-8

CMF C7 H17 N O5

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:71495

REFERENCE 2: 132:231937

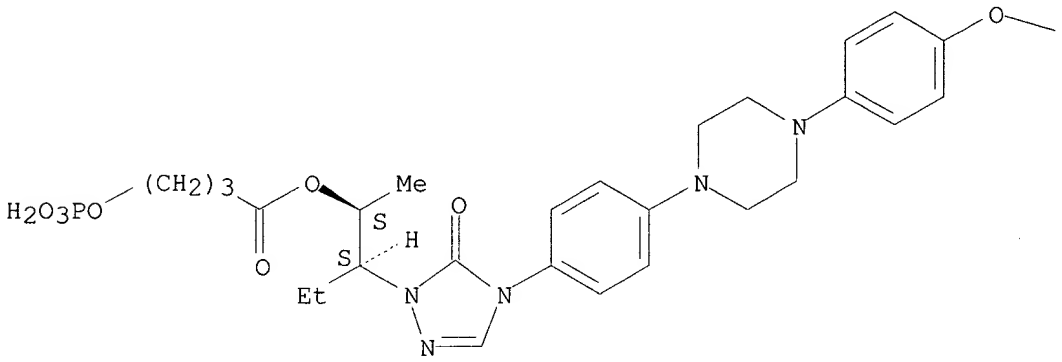
L11 ANSWER 9 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 221615-77-6 REGISTRY
CN D-Glucitol, 1-deoxy-1-(dimethylamino)-, compd. with 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[1-oxo-4-(phosphonooxy)butoxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-D-threo-pentitol (2:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[1-oxo-4-(phosphonooxy)butoxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-, compd. with 1-deoxy-1-(dimethylamino)-D-glucitol (1:2) (9CI)
FS STEREOSEARCH
MF C41 H49 F2 N8 O9 P . 2 C8 H19 N O5
SR CA
LC STN Files: CA, CAPLUS

CM 1

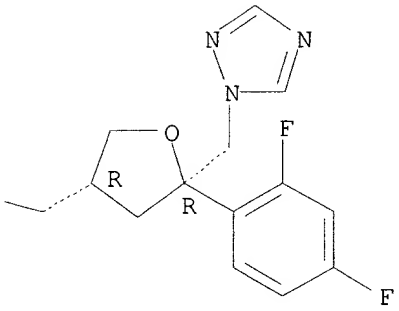
CRN 200346-83-4
CMF C41 H49 F2 N8 O9 P

Absolute stereochemistry.

PAGE 1-A



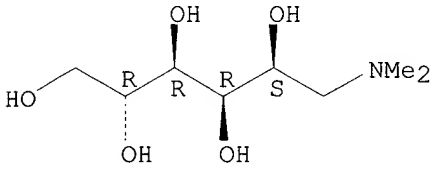
PAGE 1-B



CM 2

CRN 76326-99-3
CMF C8 H19 N O5

Absolute stereochemistry.



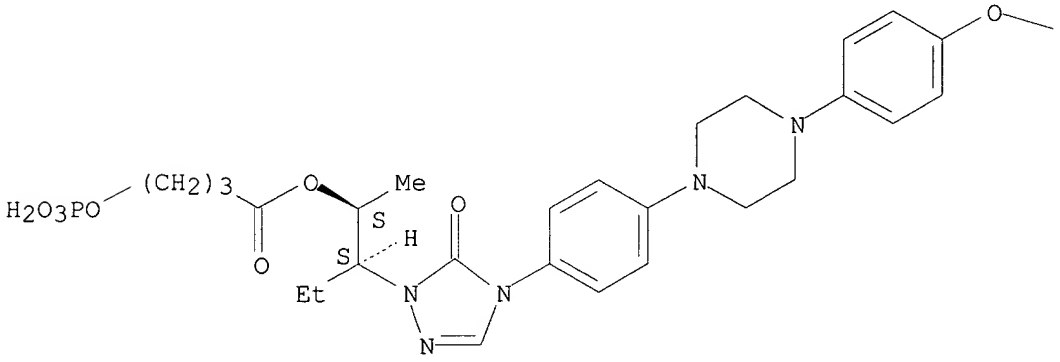
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:252364

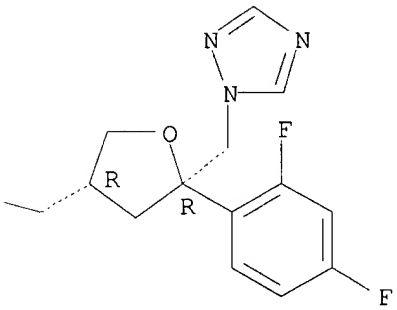
L11 ANSWER 10 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 200346-83-4 REGISTRY
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[1-oxo-4-(phosphonooxy)butoxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Sch 59884
FS STEREOSEARCH
MF C41 H49 F2 N8 O9 P
CI COM
SR CA
LC STN Files: CA, CAPLUS, DRUGUPDATES, SYNTHLINE, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1962 TO DATE)
10 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:200382

REFERENCE 2: 136:177414

REFERENCE 3: 136:71495

REFERENCE 4: 136:53728

REFERENCE 5: 132:231937

REFERENCE 6: 130:252364

REFERENCE 7: 128:128036

REFERENCE 8: 128:128035

REFERENCE 9: 128:61524

REFERENCE 10: 128:61523

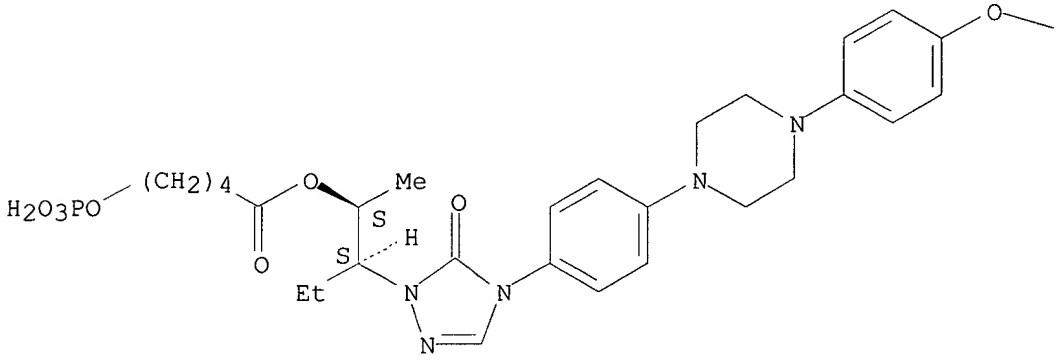
L11 ANSWER 11 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 185961-19-7 REGISTRY
CN D-Glucitol, 1-deoxy-1-(methylamino)-, compd. with 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[[1-oxo-5-(phosphonooxy)pentyl]oxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-D-threo-pentitol (2:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[[1-oxo-5-(phosphonooxy)pentyl]oxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-, compd. with 1-deoxy-1-(methylamino)-D-glucitol (1:2) (9CI)
FS STEREOSEARCH
MF C42 H51 F2 N8 O9 P . 2 C7 H17 N O5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

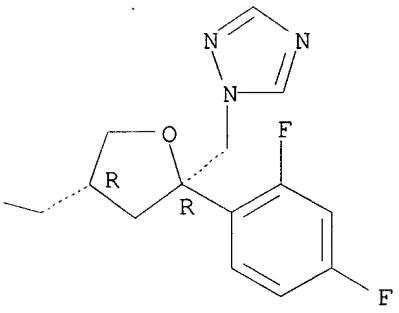
CRN 185961-18-6
CMF C42 H51 F2 N8 O9 P

Absolute stereochemistry.

PAGE 1-A



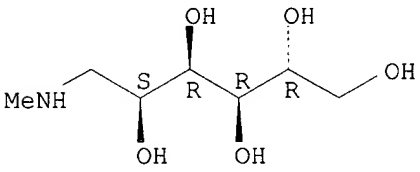
PAGE 1-B



CM 2

CRN 6284-40-8
CMF C7 H17 N O5

Absolute stereochemistry.



8 REFERENCES IN FILE CA (1962 TO DATE)
8 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 132:231937

REFERENCE 2: 128:128036

REFERENCE 3: 128:128035

REFERENCE 4: 128:102100

REFERENCE 5: 128:61524

REFERENCE 6: 128:61523

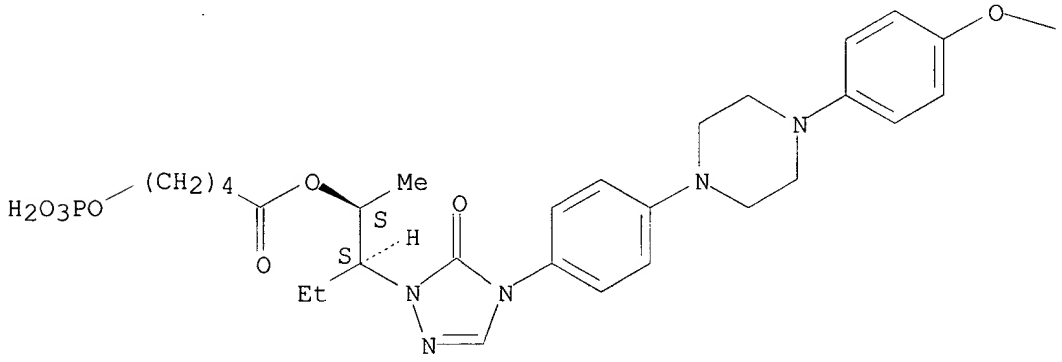
REFERENCE 7: 127:248124

REFERENCE 8: 126:104093

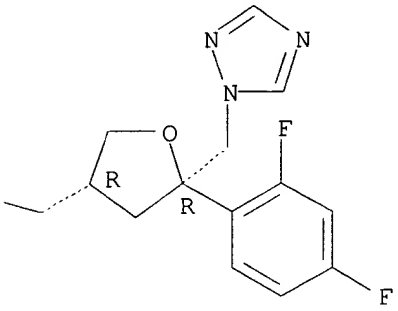
L11 ANSWER 12 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 185961-18-6 REGISTRY
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-[[1-oxo-5-(phosphonooxy)pentyl]oxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C42 H51 F2 N8 O9 P
CI COM
SR CA

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

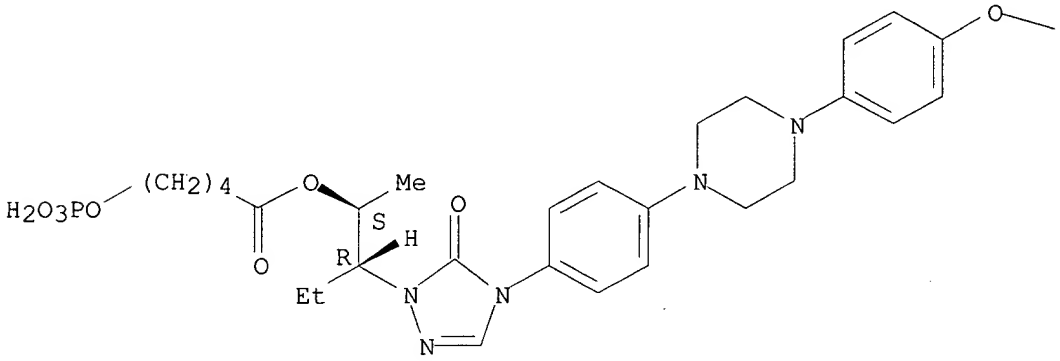
L11 ANSWER 13 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 185961-17-5 REGISTRY
CN D-Glucitol, 1-deoxy-1-(methylamino)-, compd. with 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1R,2S)-1-ethyl-2-[[1-oxo-5-(phosphonooxy)pentyl]oxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-D-threo-pentitol (2:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1R,2S)-1-ethyl-2-[[1-oxo-5-(phosphonooxy)pentyl]oxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)-, compd. with 1-deoxy-1-(methylamino)-D-glucitol (1:2) (9CI)
FS STEREOSEARCH
MF C42 H51 F2 N8 O9 P . 2 C7 H17 N O5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

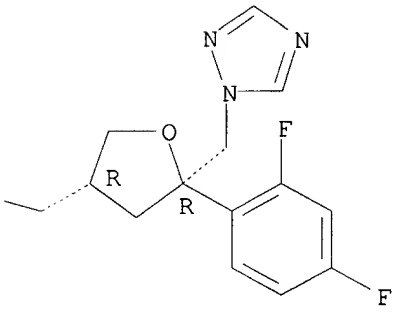
CRN 185961-16-4
CMF C42 H51 F2 N8 O9 P

Absolute stereochemistry.

PAGE 1-A



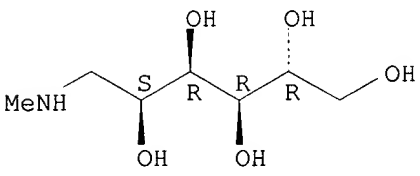
PAGE 1-B



CM 2

CRN 6284-40-8
CMF C7 H17 N O5

Absolute stereochemistry.



7 REFERENCES IN FILE CA (1962 TO DATE)
7 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 128:128036

REFERENCE 2: 128:128035

REFERENCE 3: 128:102100

REFERENCE 4: 128:61524

REFERENCE 5: 128:61523

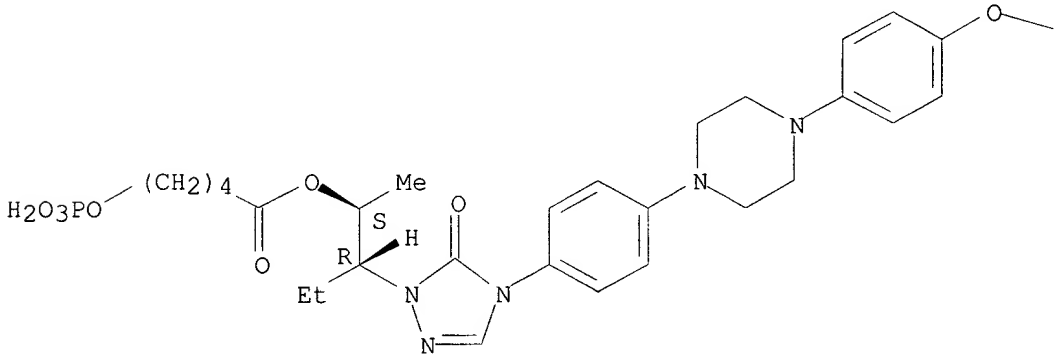
REFERENCE 6: 127:248124

REFERENCE 7: 126:104093

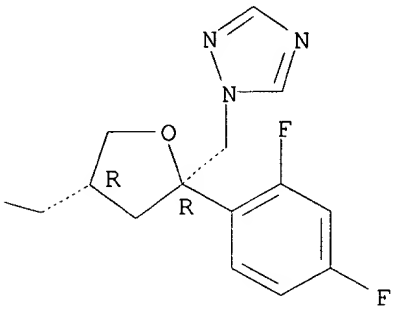
L11 ANSWER 14 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 185961-16-4 REGISTRY
CN D-threo-Pentitol, 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[4-[4-[4-[1-[(1R,2S)-1-ethyl-2-[[1-oxo-5-(phosphonooxy)pentyl]oxy]propyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy]methyl]-1-(1H-1,2,4-triazol-1-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C42 H51 F2 N8 O9 P
CI COM
SR CA

Absolute stereochemistry.

PAGE 1-A



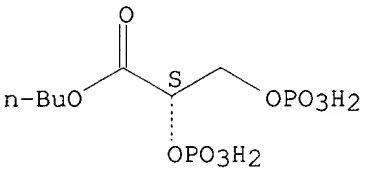
PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L11 ANSWER 15 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 180794-78-9 REGISTRY
CN Propanoic acid, 2,3-bis(phosphonooxy)-, 1-butyl ester, (S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C7 H16 O10 P2
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



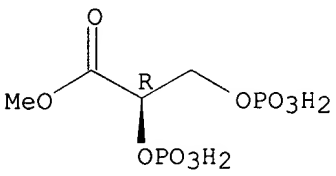
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 125:222305

L11 ANSWER 16 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 174647-48-4 REGISTRY
CN Propanoic acid, 2,3-bis(phosphonooxy)-, 1-methyl ester, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C4 H10 O10 P2
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



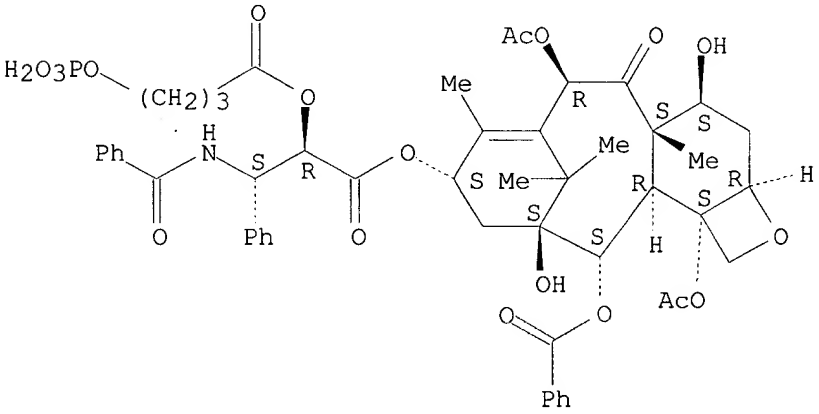
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 124:232950

L11 ANSWER 17 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 170555-38-1 REGISTRY
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-[1-oxo-4-(phosphonooxy)butoxy]-, .alpha.-[6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl] ester, disodium salt, [2aR-[2a.alpha.,4.beta.,4a.beta.,6.beta.,9.alpha.(.alpha.R*,.beta.S*),11.alpha.,12.alpha.,12a.alpha.,12b.alpha.]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C51 H58 N O19 P . 2 Na
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
CRN (170436-83-6)

Absolute stereochemistry.



●2 Na

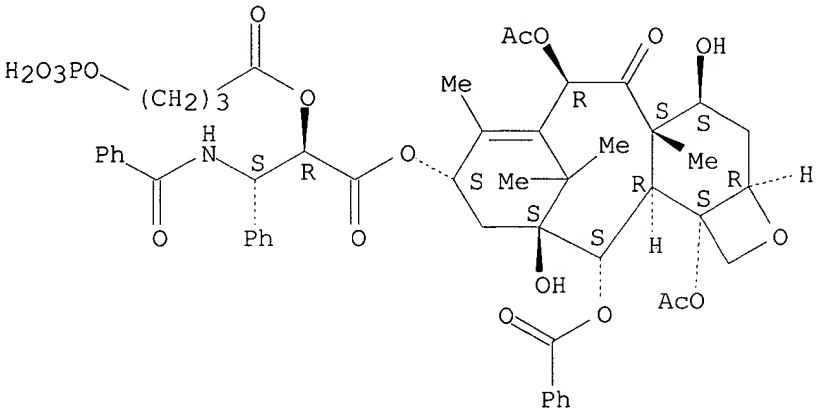
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 124:30072

L11 ANSWER 18 OF 35 REGISTRY COPYRIGHT 2002 ACS

RN 170436-83-6 REGISTRY
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-[1-oxo-4-(phosphonooxy)butoxy]-, .alpha.-[6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl] ester, [2aR-[2a.alpha.,4.beta.,4a.beta.,6.beta.,9.alpha.(.alpha.R*,.beta.S*),11.alpha.,12.alpha.,12a.alpha.,12b.alpha.]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C51 H58 N O19 P
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



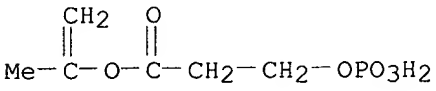
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 124:30072

L11 ANSWER 19 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 152222-66-7 REGISTRY
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate and 1-methylethenyl 3-(phosphonooxy)propanoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetic acid ethenyl ester, polymer with methylethenyl 3-(phosphonooxy)propanoate and methyl 2-methyl-2-propenoate (9CI)
CN Propanoic acid, 3-(phosphonooxy)-, 1-methylethenyl ester, polymer with ethenyl acetate and methyl 2-methyl-2-propenoate (9CI)
MF (C6 H11 O6 P . C5 H8 O2 . C4 H6 O2)x
CI PMS
PCT Polyacrylic, Polyvinyl
SR CA
LC STN Files: CA, CAPLUS

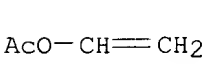
CM 1

CRN 152222-65-6
CMF C6 H11 O6 P



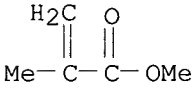
CM 2

CRN 108-05-4
CMF C4 H6 O2



CM 3

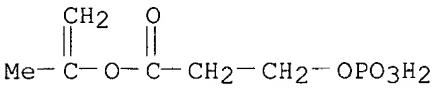
CRN 80-62-6
CMF C5 H8 O2



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

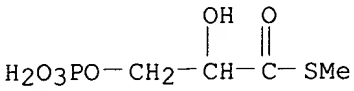
REFERENCE 1: 120:65821

L11 ANSWER 20 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 152222-65-6 REGISTRY
CN Propanoic acid, 3-(phosphonooxy)-, 1-methylethenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C6 H11 O6 P
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

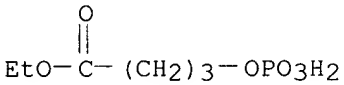
L11 ANSWER 21 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 118685-92-0 REGISTRY
CN Glyceric acid, 1-thio-, S-methyl ester, 3-phosphate (6CI) (CA INDEX NAME)
FS 3D CONCORD
MF C4 H9 O6 P S
SR CAOLD
LC STN Files: CAOLD



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

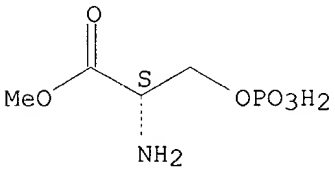
L11 ANSWER 22 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 117146-84-6 REGISTRY
CN Butyric acid, 4-hydroxy-, ethyl ester, phosphate, barium salt (6CI) (CA INDEX NAME)
MF C6 H13 O6 P . Ba
SR CAOLD
LC STN Files: CAOLD
CRN (98275-36-6)



1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L11 ANSWER 23 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 108211-07-0 REGISTRY
CN Serine, methyl ester, phosphate barium salt (6CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C4 H10 N O6 P . 1/2 Ba
SR CAOLD
LC STN Files: CAOLD
CRN (6401-59-8)

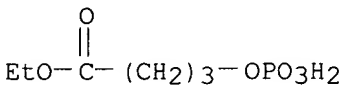
Absolute stereochemistry.



1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L11 ANSWER 24 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 98275-36-6 REGISTRY
CN Butyric acid, 4-hydroxy-, ethyl ester, phosphate (6CI) (CA INDEX NAME)
FS 3D CONCORD
MF C6 H13 O6 P
CI COM

SR CAOLD
LC STN Files: BEILSTEIN*, CAOLD
(*File contains numerically searchable property data)

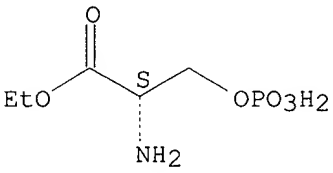


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L11 ANSWER 25 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 98139-38-9 REGISTRY
CN L-Serine, ethyl ester, dihydrogen phosphate (ester) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Serine, ethyl ester, phosphate (6CI)
FS STEREOSEARCH
MF C5 H12 N O6 P
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.

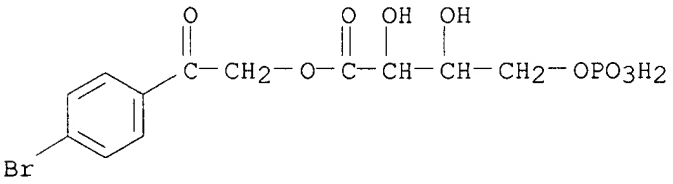


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 122:159073

L11 ANSWER 26 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 91720-64-8 REGISTRY
CN Erythronic acid, ester with 4'-bromo-2-hydroxyacetophenone, 4-phosphate (7CI) (CA INDEX NAME)
MF C12 H14 Br O9 P
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

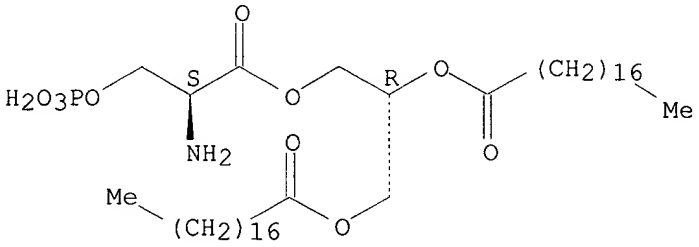
REFERENCE 1: 59:82475

L11 ANSWER 27 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 61103-37-5 REGISTRY
CN L-Serine, 2-[(1-oxooctadecenyl)oxy]-3-[(1-oxooctadecyl)oxy]propyl ester, dihydrogen phosphate (ester), (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C42 H80 N O10 P
CI IDS
LC STN Files: CA, CAPLUS

CM 1

CRN 61103-36-4
CMF C42 H82 N O10 P

Absolute stereochemistry.

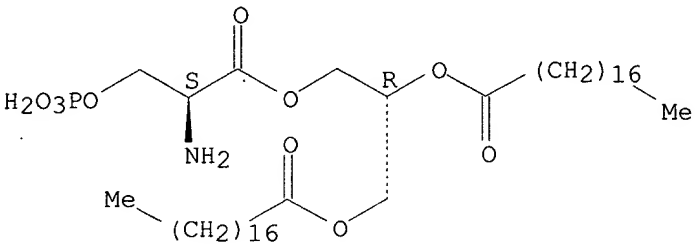


1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 85:188548

L11 ANSWER 28 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 61103-36-4 REGISTRY
CN L-Serine, 2,3-bis[(1-oxooctadecyl)oxy]propyl ester, dihydrogen phosphate (ester), (R)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Dioctadecanoylphosphatidylserine
FS STEREOSEARCH
MF C42 H82 N O10 P
CI COM
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

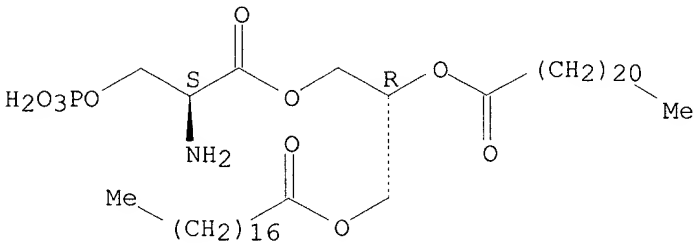
REFERENCE 1: 119:222612

L11 ANSWER 29 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 61103-35-3 REGISTRY
CN L-Serine, 2-[(1-oxodocosahexaenyl)oxy]-3-[(1-oxooctadecyl)oxy]propyl ester, dihydrogen phosphate (ester), (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C46 H78 N O10 P
CI IDS
LC STN Files: CA, CAPLUS

CM 1

CRN 61103-34-2
CMF C46 H90 N O10 P

Absolute stereochemistry.

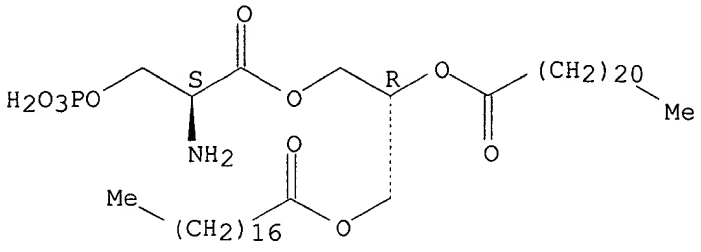


1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 85:188548

L11 ANSWER 30 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 61103-34-2 REGISTRY
CN L-Serine, 2-[(1-oxodocosyl)oxy]-3-[(1-oxooctadecyl)oxy]propyl ester, dihydrogen phosphate (ester), (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C46 H90 N O10 P
CI COM

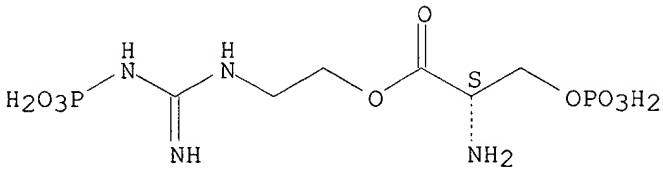
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L11 ANSWER 31 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 18555-02-7 REGISTRY
CN Serine, 2-(3-phosphonoguanidino)ethyl hydrogen phosphate (ester) (8CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C6 H16 N4 O9 P2
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



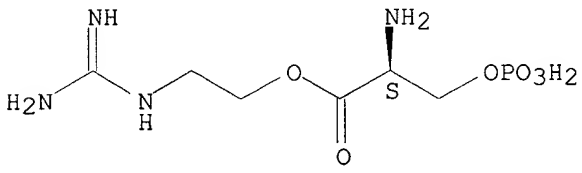
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 68:46881

L11 ANSWER 32 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 16657-65-1 REGISTRY
CN Serine, L-, ester with (2-hydroxyethyl)guanidine, dihydrogen phosphate (ester) (8CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C6 H15 N4 O6 P
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

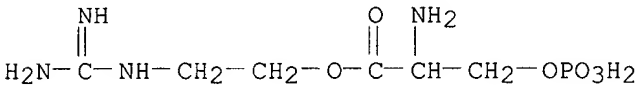


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 66:83453

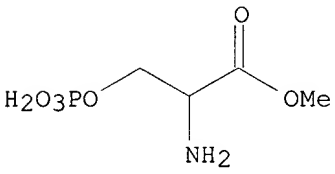
L11 ANSWER 33 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 14960-19-1 REGISTRY
CN Serine, 2-[(aminoiminomethyl)amino]ethyl hydrogen phosphate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Serine, ester with (2-hydroxyethyl)guanidine, dihydrogen phosphate (ester) (8CI)
CN Serine, ester with (2-hydroxyethyl)guanidine, dihydrogen phosphate (7CI)
OTHER NAMES:
CN Guanidine, [2-[[(2-carboxy-2-hydroxyethoxy)hydroxyphosphinyl]oxy]ethyl]-
FS 3D CONCORD
MF C6 H15 N4 O6 P
LC STN Files: CAOLD



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L11 ANSWER 34 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 6401-60-1 REGISTRY
CN Serine, methyl ester, dihydrogen phosphate, DL- (7CI, 8CI) (CA INDEX NAME)
MF C4 H10 N O6 P
LC STN Files: BEILSTEIN*, CAOLD
(*File contains numerically searchable property data)



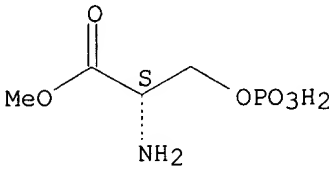
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L11 ANSWER 35 OF 35 REGISTRY COPYRIGHT 2002 ACS
RN 6401-59-8 REGISTRY
CN L-Serine, methyl ester, dihydrogen phosphate (ester) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Serine, methyl ester, dihydrogen phosphate (ester), L- (8CI)
CN Serine, methyl ester, phosphate (6CI)
FS STEREOSEARCH
MF C4 H10 N O6 P
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS

(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 92:17901

REFERENCE 2: 76:46490

REFERENCE 3: 70:84504